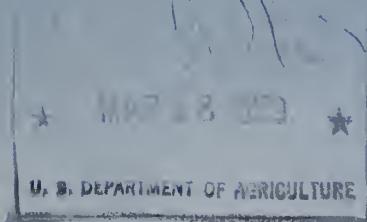


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

196
R31Fow
Cop. 2

Here, on Mt. Rose, Nevada, Dr. J. E. Church made
the first western snow survey 50 years ago.



FEDERAL - STATE - PRIVATE COOPERATIVE
SNOW SURVEY and WATER SUPPLY FORECASTS
for
NEVADA

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
NEVADA STATE ENGINEER

In cooperation with the State, data were obtained by the agencies named above
in cooperation with Federal, State and private organizations listed
on the reverse side of this report.

AS OF
MAR. 1, 1959

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
RIVER BASINS			
COLORADO, RIO GRANDE	MONTHLY (FEB.-MAY).....	COLO. EXP. STATION	FT. COLLINS, COLO.
AND ARKANSAS		COLO. STATE ENGINEER	
		NEW MEXICO STATE ENGINEER	
COLUMBIA <i>Includes Alaska</i>	MONTHLY (JAN.-MAY).....	IDAHO STATE ENGINEER	BOISE, IDAHO
UPPER MISSOURI.....	MONTHLY (FEB.-MAY).....	MONT. AGR. EXP. STATION	BOZEMAN, MONTANA
WEST-WIDE.....	(OCT. 1, APR. 1)	COOPERATORS	PORTLAND, OREGON AND MAY 1)
STATES			
ARIZONA.....	SEMI-MONTHLY	SALT R. VALLEY WATER..... (JAN. 15-APR. 1) USERS ASSOCIATION	PHOENIX, ARIZONA
NEVADA.....	MONTHLY (FEB.-APR.).....	NEVADA STATE ENGINEER	RENO, NEVADA
OREGON.....	MONTHLY (JAN.-MAY).....	ORE. AGR. EXP. STATION	PORTLAND, OREGON
UTAH.....	MONTHLY (JAN.-MAY).....	UTAH STATE ENGINEER UTAH AGR. EXP. STATION	SALT LAKE CITY, UTAH
WASHINGTON.....	MONTHLY (FEB.-MAY).....	WASH. STATE DEPT. OF CONSERVATION	SPOKANE, WASHINGTON
WYOMING.....	MONTHLY (FEB.-JUNE).....	WYOMING STATE ENGINEER	CASPER, WYOMING
Copies of the various reports may be secured from: Head, Water Supply Forecasting Section Soil Conservation Service 209 S.W. 5th Avenue, Portland 4, Oregon			

PUBLISHED BY OTHER AGENCIES

OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA.....	MONTHLY (FEB.-JUNE).....	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANDS AND FORESTS. PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA.....	MONTHLY (FEB.-MAY).....	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

FEDERAL - STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS

For

N E V A D A

Report Prepared

By

Norman S. Hall
and
Roy E. Malsor, Jr.

Soil Conservation Service
1479 Wells Avenue
Reno, Nevada

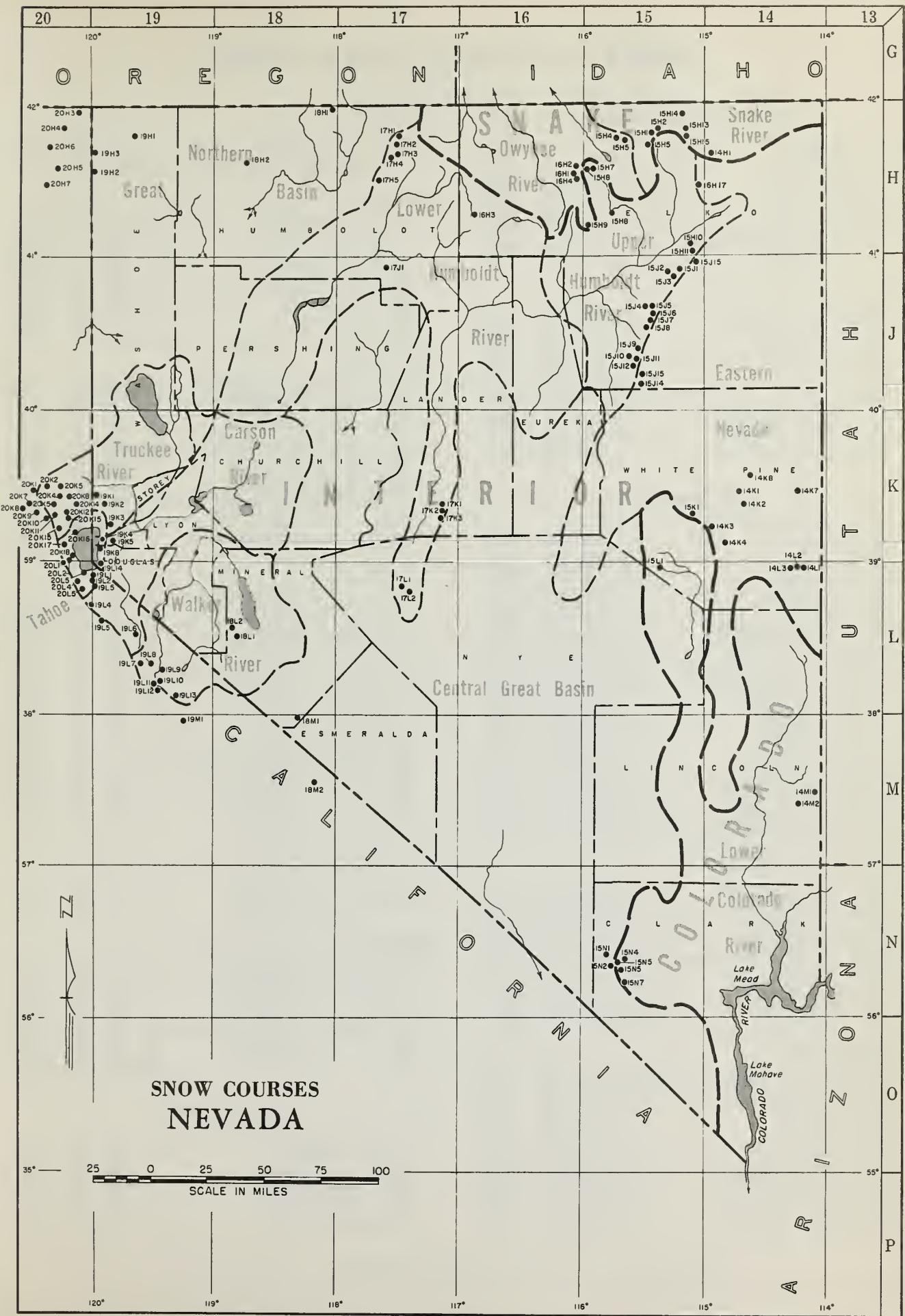
Issued By

Charles W. Cleary, Jr.
State Conservationist
Soil Conservation Service
Reno, Nevada

Ed Muth
Nevada State Engineer
Department of Conservation
and Natural Resources
Carson City, Nevada

March 1, 1959





INDEX to NEVADA SNOW COURSES

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.	NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.						
SNAKE RIVER BASIN																	
SNAKE RIVER						15N 2	CLARK CANYON	8	19S	56E	9000						
15H 1 BEAR CREEK		31	46N	58E	7800	15N 1	TROUGH SPRINGS	23	18S	55E	8500						
15H 2 FOX CREEK		33	46N	58E	6800	18M 1	MONTGOMERY PASS	4	1N	33E	7100						
15H 3 76 CREEK		6	44N	58E	7100	18M 2	CAMPITO MTN	19	5S	35E	10200						
15H 5* GOLO CREEK		31	45N	56E	6600	NORTHERN GREAT BASIN											
15H 4* BIG BEND		30	45N	56E	6700	19H 1	BALO MOUNTAIN	17	45N	21E	6720						
15H13 GOAT CREEK		31	46N	60E	8800	18H 1	DISASTER PEAK	8	47N	34E	6500						
15H14 POLE CREEK RANGER STATION	13	46N	59E		18H 2	LEONARO CREEK	13	42N	28E	5900							
15H15 HUMMINGBIRD SPRINGS		6	45N	60E	8945	19H 3	49-MTN	7	42N	19E	6000						
14H 1 JAKES CREEK		6	42N	62E	7000	19H 2	HAYS CANYON	1	39N	18E	6400						
OWYHEE RIVER																	
17H 2* LOWER BUCKSKIN		25	45N	39E	6700	20H 4	RESERVATION CREEK	12	46N	15E	5900						
17H 1* UPPER BUCKSKIN		11	45N	39E	7200	20H 5	BARBER CREEK	23	39N	16E	6500						
17H 3* MARTIN CREEK		18	44N	40E	6700	20H 6	CEOAR PASS	12	43N	14E	7100						
17H 4* GRANITE PEAK		22	44N	39E	7800	20H 7	EAGLE PEAK	35	40N	15E	8300						
15H 5 GOLO CREEK		31	45N	56E	6600	LAKE TAHOE											
15H 4 BIG BENO		30	45N	56E	6700	20L 4	(CAL.) LAKE LUCILLE	28	12N	17E	8400						
15H 7* FRY CANYON		31	43N	54E	6700	20L 1	(CAL.) RUBICON #1	6	13N	17E	8100						
15H 6* ROOEFLAT		36	43N	53E	6800	19L 3	(CAL.) HAGANS MEAOOW	36	12N	18E	8000						
16H 1 LOWER JACK CREEK		18	42N	53E	6800	19L 2	(CAL.) FREEL BENCH	36	12N	18E	7300						
16H 2 UPPER JACK CREEK		9	42N	53E	7250	20K17	(CAL.) WARD CREEK	21	15N	16E	7000						
15H 8* TREMEWAN RANCH		9	39N	55E	5700	19L 1	(CAL.) UPPER TRUCKEE	21	12N	18E	6400						
15H 9 TAYLOR CANYON		35	39N	53E	6200	20K16	(CAL.) TAHOE CITY	6	15N	17E	6250						
16H 4 JACKS PEAK		28	42N	53E	8420	20L 2	(CAL.) RUBICON #2	6	13N	17E	7500						
INTERIOR																	
UPPER HUMBOLDT RIVER																	
15H 1* BEAR CREEK		31	46N	58E	7800	19K 4	MARLETTE LAKE	13	15N	18E	8000						
15H 2* FOX CREEK		33	46N	58E	6800	19K 5	DAGGETTS PASS	19	13N	19E	7350						
15H 3* 76 CREEK		6	44N	58E	7100	19K 6	GLENBROOK #2	13	14N	18E	6900						
15H 5* GOLO CREEK		31	45N	56E	6600	19K 2*	Mt. ROSE	7	17N	19E	9000						
15H 4* BIG BEND		30	45N	56E	6700	TRUCKEE RIVER											
15H 7 FRY CANYON		31	43N	54E	6700	20K 5	(CAL.) INDEPENDENCE LAKE	9	18N	15E	8450						
15H 6 ROOEFLAT		36	43N	53E	6800	20K 1*	(CAL.) WEBBER PEAK	30	19N	14E	8000						
16H 1* LOWER JACK CREEK		18	42N	53E	6800	20K10*	(CAL.) DONNER SUMMIT	25	17N	14E	6900						
16H 2* UPPER JACK CREEK		9	42N	53E	7250	20K17*	(CAL.) WARD CREEK	21	15N	16E	7000						
15H 8 TREMEWAN RANCH		9	39N	55E	5700	20K 2	(CAL.) WEBBER LAKE	20	19N	14E	7000						
15H 9* TAYLOR CANYON		35	39N	53E	6200	20K 6	(CAL.) SAGE HEN CREEK	7	18N	16E	6500						
15H10 LOWER TROUT CREEK		28	37N	61E	6900	20K16*	(CAL.) TAHOE CITY	6	15N	17E	6250						
15H11 UPPER TROUT CREEK		4	36N	61E	8500	20K13	(CAL.) TRUCKEE #2	22	17N	16E	6400						
15J 1 DORSEY BASIN		28	35N	60E	8100	20K 3	(CAL.) INDEPENDENCE CREEK	14	19N	15E	6500						
15J 2 RYAN RANCH		1	34N	59E	5800	20K14	(CAL.) BOCA #2	28	18N	17E	5900						
15J 3 DRY CREEK		5	34N	60E	6500	20K 8*	(CAL.) FURNACE FLAT	10	17N	13E	6600						
15J 4 LAMOILLE #1		15	32N	58E	7100	20K 7*	(CAL.) FOROYCE LAKE	34	18N	13E	6500						
15J 5 LAMOILLE #2		14	32N	58E	7300	20K 9*	(CAL.) SODA SPRINGS	23	17N	14E	6750						
15J 6 LAMOILLE #3		24	32N	58E	7700	20K 4	(CAL.) INDEPENDENCE CAMP	34	19N	15E	7000						
15J 7 LAMOILLE #4		19	32N	59E	8000	19K 2	Mt. ROSE	7	17N	19E	9000						
15J 8 LAMOILLE #5		31	32N	59E	8700	20K12	(CAL.) TRUCKEE RANGER STA.	10	17N	16E	6000						
15J 9 GREEN MOUNTAIN		23	29N	57E	8000	20K11	(CAL.) DONNER LAKE	14	17N	15E	5950						
15J10 HARRISON PASS #1		9	28N	57E	6600	19K 1	BIG MEADOWS	15	18N	18E	8800						
15J11 HARRISON PASS #2		16	28N	57E	7400	19K 3	LITTLE VALLEY	17	16N	19E	6300						
15J12 CORRAL CANYON		27	28N	57E	8500	20K15	(CAL.) SOUAW VALLEY	6	15N	16E	7500						
LOWER HUMBOLDT RIVER																	
17H 2 LOWER BUCKSKIN		25	45N	39E	6700	CARSON RIVER											
17H 1 UPPER BUCKSKIN		11	45N	39E	7200	19L 4	(CAL.) CARSON PASS	22	10N	18E	8600						
17H 3 MARTIN CREEK		18	44N	40E	6700	19L 6	(CAL.) POISON FLAT	25	8N	21E	7900						
17H 4 GRANITE PEAK		22	44N	39E	7800	19L 5	(CAL.) BLUE LAKES	30	9N	19E	8000						
17H 5 LAMANCE CREEK		13	42N	38E	6000	19K 5	CLEAR CREEK	16	14N	19E	7300						
16H 3 MIOAS		18	39N	46E	7200	WALKER RIVER											
17K 1 BIG CREEK CAMP GROUND		10	17N	43E	6600	19L12	(CAL.) CENTER MOUNTAIN	4	3N	23E	9400						
17K 2 BIG CREEK MINE		23	17N	43E	7600	19L 7	(CAL.) SONORA PASS	1	5N	21E	8800						
17K 3 UPPER BIG CREEK		26	17N	43E	8000	19L11	(CAL.) BUCKEYE FORKS	20	4N	23E	8500						
17L 1 LOWER CORRAL		12	11N	40E	7500	19L13	(CAL.) VIRGINIA LAKES	5	2N	25E	9500						
17L 2 UPPER CORRAL		20	11N	41E	8500	19L 9	(CAL.) WILLOW FLAT	21	5N	23E	8260						
17J 1 GOLCONOA		22	35N	39E	6000	19L10	(CAL.) BUCKEYE ROUGHS	15	4N	23E	7900						
EASTERN NEVADA																	
15J15 HOLE-IN-MTN		6	35N	61E	7900	19L 8	(CAL.) LEAVITT MEADOWS	4	5N	22E	7200						
15J13 CAVE CREEK		25	27N	57E	7500	19M 1*	(CAL.) TIOGA PASS	30	1N	25E	9900						
15J14 HAGER CANYON		34	27N	57E	8000	18L 1	LAPON MEADOW	36	8N	28E	9000						
14K 3 MURRAY SUMMIT		25	16N	62E	7250	18L 2	MT. GRANT	23	8N	28E	9000						
14L 1 BAKER #1		29	13N	69E	7950	COLORADO											
14L 2 BAKER #2		30	13N	69E	8950	15N 5	KYLE CANYON	26	19S	56E	8200						
14L 3 BAKER #3		25	13N	68E	9250	15N 4	LEE CANYON #1	10	19S	56E	8300						
14K 2 BERRY CREEK		26	17N	65E	9100	15N 3	LEE CANYON #2	9	19S	56E	9000						
14K 1 BIRO CREEK		34	19N	65E	7500	15N 7	RAINBOW CANYON #2	6	20S	57E	8100						
15K 1 ROBINSON SUMMIT		34	18N	61E	7600	14M 1	MATHEW CANYON	11	5S	70E	6000						
14K 4 WARD MOUNTAIN		25	15N	62E	7875	14M 2	PINE CANYON	11	6S	69E	6200						
14K 7 SILVER CREEK #2		30	16N	69E	8000	15L 1	WHITE RIVER #1	31	13	59E	7400						
14K 8 KALAMAZOO CREEK		34	20N	65E	7400												
15L 1* WHITE RIVER #1		31	13N	59E	7400												

TABLE OF CONTENT

	Page
BRIEF STATEWIDE SUMMARY	1
SUMMARY OF FORECASTS	2
SUMMARY OF RESERVOIR STATUS	3
GRAPHICAL SNOW COVER COMPARISON	Plate 1
WATER SUPPLY CONDITIONS IN:	
North Truckee, Fernley & Washoe Valley SCD's, Washoe, Storey, & Lyon Counties	Plate 2
Carson Valley SCD, Nevada & Alpine SCD, California	Plate 3
Stillwater, Sheckler, Lahontan SCD's & vicinity, Churchill County	Plate 4
Smith & Mason Valley SCD's, Nevada & East Walker & Mono County SCD's, California	Plate 5
Esmeralda SCD, Esmeralda County	Plate 6
Central & Southern Nevada, Clark, Lincoln, & Nye Counties	Plate 7
White Pine SCD, White Pine, Lincoln & Nye Counties	Plate 8
Clover & Ruby SCD's, Elko County	Plate 9
Northeast Elko SCD, Elko County	Plate 10
Duck Valley & Owyhee SCD's, Elko County	Plate 11
Humboldt River	Plate 12
Austin & Eureka SCD's, Eureka & Lander Counties	Plate 13
Paradise Valley & Quinn River SCD's	Plate 14
Vya SCD, Nevada & Surprise Valley, SCD, California	Plate 15
LIST OF COOPERATORS	(Inside back cover)



WATER SUPPLY OUTLOOK
FOR NEVADA

March 1, 1959

*
* February storms improved the water supply in*
* western Nevada but the Humboldt River Basin *
* can expect critical low flows. Fortunately,*
* reservoir storage throughout the State is *
* above normal. *
* *

March 1 forecast of irrigation season water supply range from 87% of normal flow on the Carson River to 24% on the Humboldt and a low of 18% of normal on the Owyhee River. Extremely low snowpack and dry watershed soils combine to make the prospective irrigation season water supply one of the lowest on record in Elko County.

During the April-July runoff period, below normal flows are also expected in western Nevada. On the Truckee-Tahoe system, the Truckee Basin Water Committee is forecasting a flow of 68,000 acre feet or 85% of the 1938-52 normal on the Little Truckee above Boca. On the Truckee at Farad, the forecast is for 200,000 acre feet or 72% of the 1938-52 normal. On March 1, the elevation of Lake Tahoe was 6227.69 feet above sea level. The rise of Lake Tahoe, from April 1, is expected to be 1.1 feet or 69% of the 1938-52 normal rise. All forecasts are based on the assumption of normal temperature and precipitation during the forecast period. Forecasts will be revised after the April 1 snow surveys.

On the Carson River, forecasts by the Soil Conservation Service range from 87% at Gardnerville to 74% at Fort Churchill.

The East Walker is being estimated to flow 62% at Bridgeport while 75% of normal flow is expected on the West Walker at Coleville.

In southern Nevada, the snowpack in the Spring Mountains is 75% of the March 1, 1938-52 normal. White Pine County has about 50% of normal snowpack.

Elko County is being faced with a critical water shortage. The Owyhee near Gold Creek is being forecasted at only 18% of normal and downstream at Owyhee, flows of 23% are expected. Lamoille Creek is expected to flow during April-July about 53% and the South Fork of the Humboldt will flow 28%. The main Humboldt at Palisade is expected to flow 24%.

The snowpack in the Santa Rosa Mountains north of Paradise Valley is the highest in the Humboldt drainage. Here, Martin Creek is being forecasted to flow at 78% of normal.

Nearly full reservoirs insure adequate water supplies for those fortunate enough to own reservoir water rights. Statewide reservoirs are 76% of capacity or 126% of the March 1 average.



NEVADA STREAMFLOW FORECASTS - MARCH 1, 1959

The following summarized runoff forecasts are based principally on mountain snow cover and the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

Forecast Stream	April-July, Streamflow Thousands Acre Feet				
	Forecast 1959	15-Yr. Av. 1938-52	1959 as % of 15-Yr.Av.	Measured 1958	Runoff 1957
Owyhee River nr. Gold Creek, Nev. ¹	5	28	18	37	28
Owyhee River nr. Owyhee, Nev. ¹	20	88	23	110	102
Lamoille Creek nr. Lamoille, Nev.	16	30	53	29	34
So. Fk. Humboldt nr. Elko, Nev.	24	84	28	77	78
Humboldt River at Palisade, Nev.	60	249	24	228	247
Martin Creek nr. Paradise, Nev.	14	18	78	30	21
East Walker nr. Bridgeport, Cal. ²	45	73	62	125	48
West Walker nr. Coleville, Cal.	120	160	75	218	128
East Carson nr. Gardnerville, Nev.	170	195	87	276	162
West Carson at Woodfords, Cal.	46	55	84	84	50
Carson River nr. Carson City	150	192	78	298	148
Carson River at Ft. Churchill	141	189	74	274	159
Little Truckee River above Boca, California ⁵	68	80	85	169	71
Truckee River at Farad, Cal. ^{3,5}	200	279	72	456	206
Lake Tahoe ^{4,5}	1.1	1.6	69	2.58	1.4
Salmon Falls Creek nr. San Jacinto, Nevada	60* 57**	92 88	65 65	- -	104

1. Corrected for storage in Wild Horse Reservoir.
2. For period April through August corrected for storage in Bridgeport Reservoir.
3. Exclusive of Tahoe and corrected for storage in Boca Reservoir.
4. Maximum rise, in feet, from April 1, assuming gates closed.
5. Forecast issued by Truckee Basin Water Committee which is composed of Truckee-Carson Irrigation District, Sierra Pacific Power Company and Washoe County Water Conservation District.

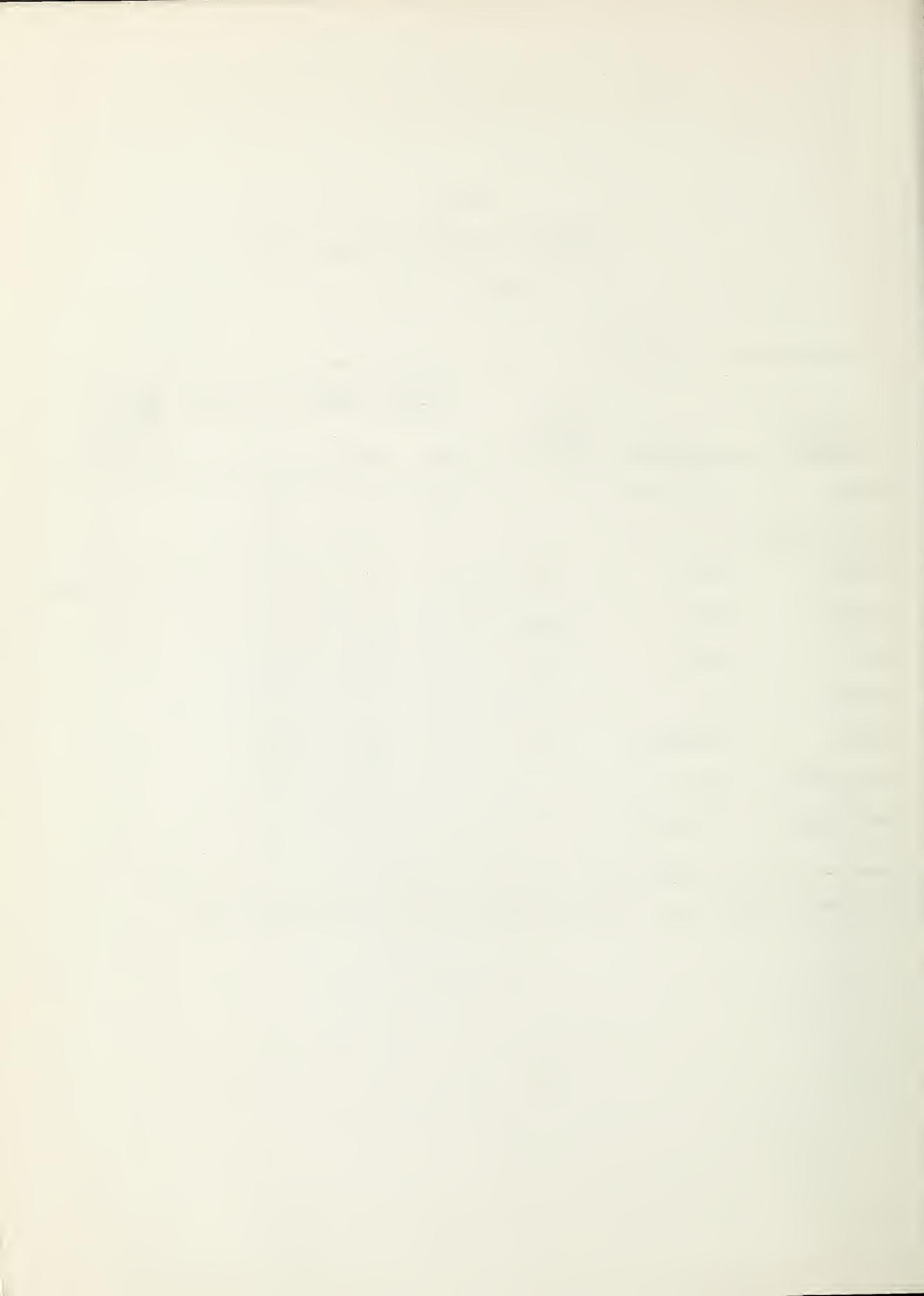
* Forecast period of March-September.
 ** Forecast period of March-July.



NEVADA
STATUS OF RESERVOIR STORAGE
MARCH 1, 1959

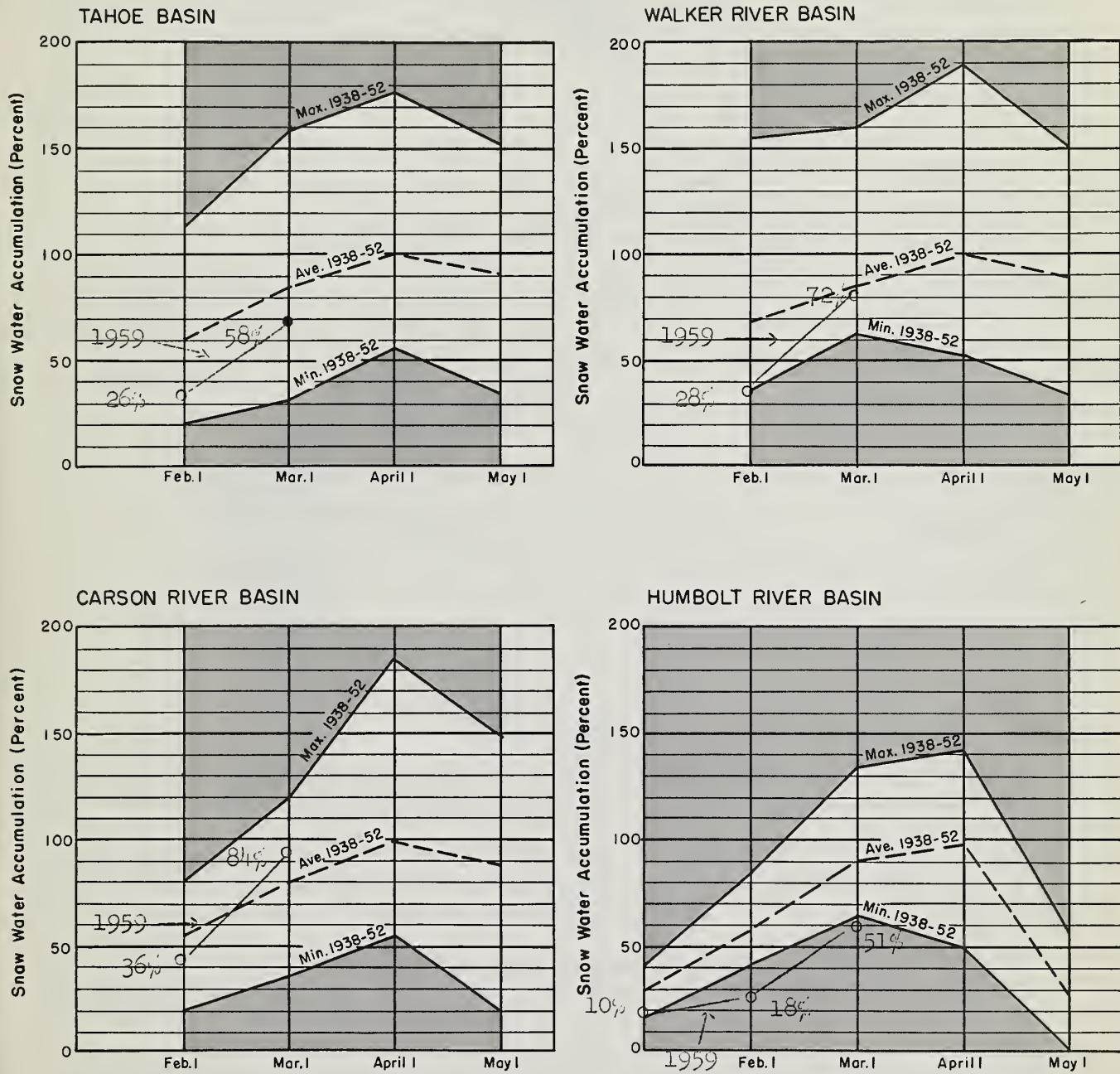
BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (1000 AF)	USABLE STORAGE - 1000 ACRE FEET			MARCH 1 15-YR. AVE. 1938-52
			1959	1958	1957	
Owyhee	Wild Horse	33	22	19	26	12
Lower Humboldt	Rye Patch	179	120	18	43	89
Colorado	Mohave	1,810	1,696	1,743	1,671	New Reservoir*
Colorado	Mead	27,217	21,194	19,712	11,700	18,517
Tahoe	Tahoe	732	563	583	602	427
Truckee	Boca	41	2	10	10	8
Carson	Lahontan	286	237	205	225	218
West Walker	Topaz	59	52	30	57	40
East Walker	Bridgeport	42	42	30	42	33

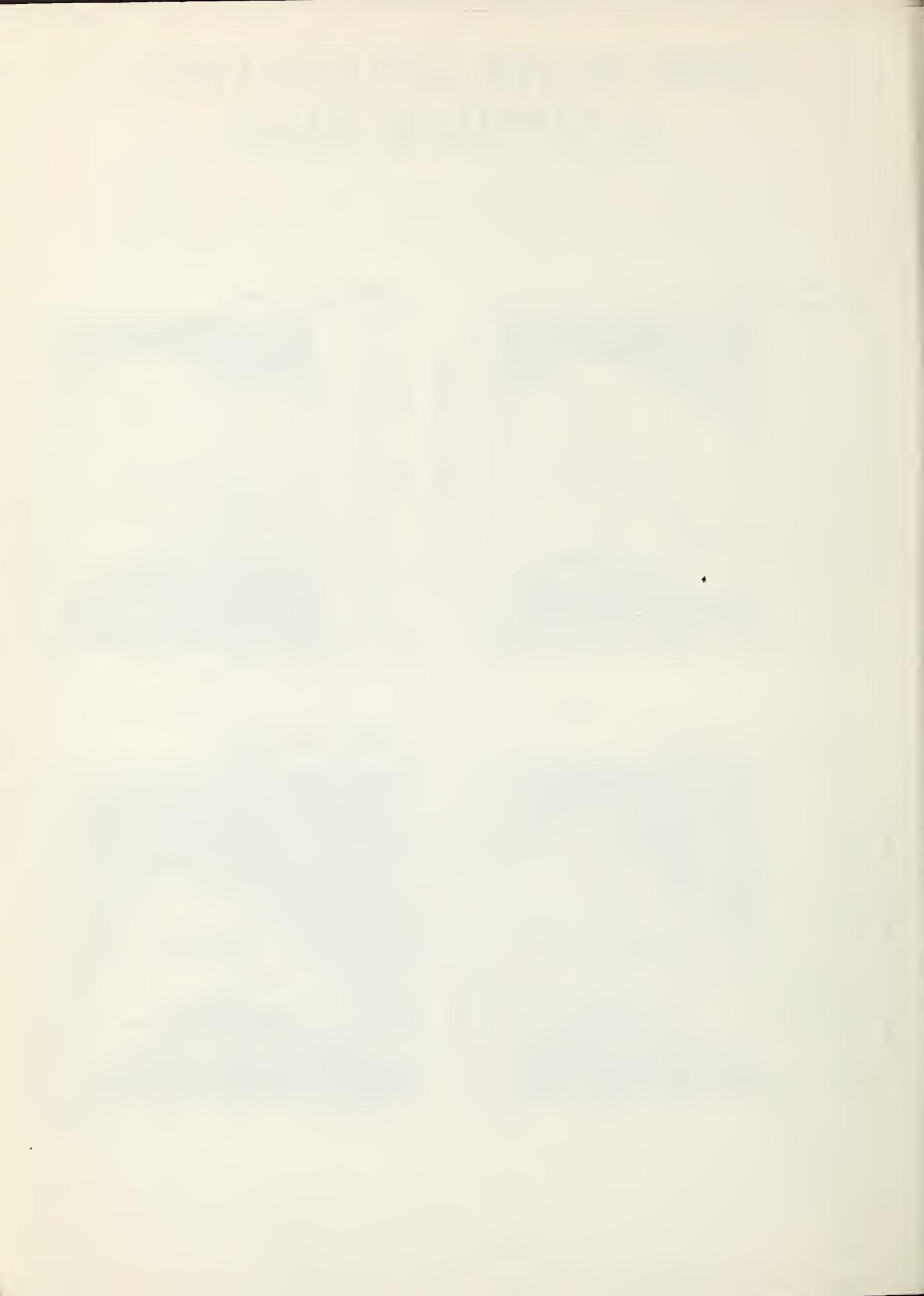
* Storage began in 1950. The 1950-58 average is 1,498,000 acre feet.



SNOW WATER ACCUMULATION in NEVADA by BASIN

MARCH 1, 1959

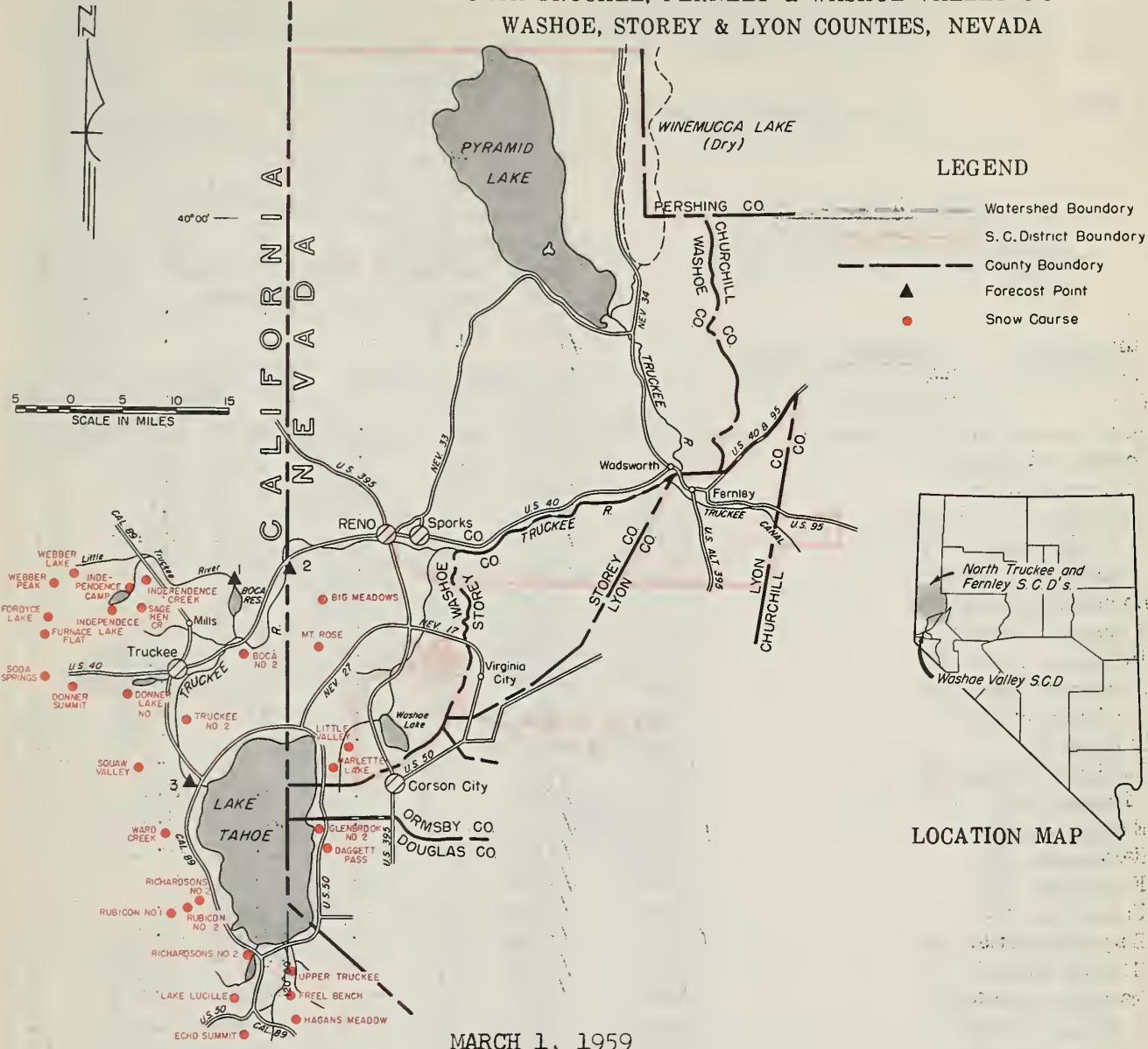




SNOW SURVEY & WATER SUPPLY FORECAST

NORTH TRUCKEE, FERNLEY & WASHOE VALLEY S.C.D's.

WASHOE, STOREY & LYON COUNTIES, NEVADA



MARCH 1, 1959

Heavy storms during mid-February materially improved the runoff prospects in the Tahoe-Truckee basin. However runoff forecasts are for below normal flows.

The March 1 elevation of Lake Tahoe was 6227.86 feet above sea level. According to the Truckee Basin Water Committee the rise of Lake Tahoe is expected to be 1.1 foot from April 1 through the runoff period.

The Truckee River at Farad is forecast to flow 200,000 acre feet runoff during the April 1 through July 31 period. The Little Truckee above Boca, the forecast is for 68,000 acre feet runoff.

It appears that a full water supply will be available for irrigation and power uses on the Truckee River for the coming season, because reservoir storage is above normal.

Forecasts will be revised after the April 1 snow surveys.

(over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Lake Tahoe	732	563	583	427
Boca	41	2	10	8

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. Little Truckee R. above Boca, Calif.	68	169	80
2. Truckee River at Farad, Calif.	200	456	279
3. Lake Tahoe rise (in feet from April 1 assuming gates closed)	1.1	2.58	1.6
Note: Above forecasts prepared by Truckee Basin Water Committee			

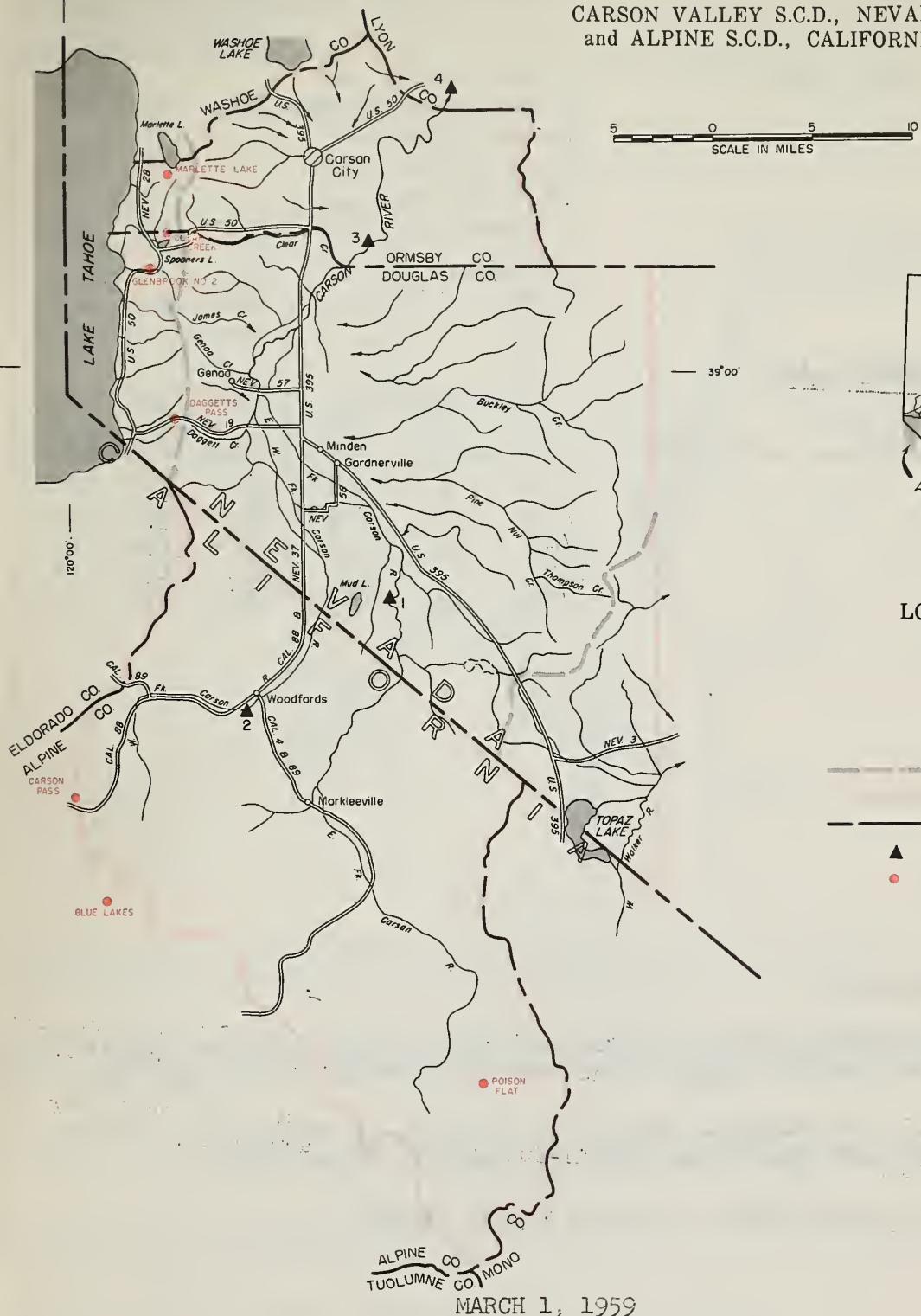
SNOW

MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
Fordyce Lake	6500	2/27	79	27.6	39.2	36.0
Furnace Flat	6600	2/27	81	32.8	44.6	41.5
Independence Camp	7000	3/3	41	15.4	23.9	17.9
Independence Creek	6500	3/3	28	10.1	14.6	11.4
Sage Hen Creek	6500	3/2	42	14.0	18.8	15.4
Soda Springs	6750	2/26	65	25.4	34.8	31.9
Donner Summit	6900	2/26	74	25.8	35.7	34.7
Donner Lake #1	5950	2/28	44	15.0	22.3	16.1
Donner Park #2	6000	2/28	74	14.1	New Course	
Truckee #2	6400	3/2	32	10.2	14.5	15.6
Boca #2	5900	2/28	15	4.6	7.7	9.0
Squaw Valley #2	7500	3/4	98	36.4	-	-
Tahoe City	6250	3/4	19	8.0	13.2	13.5
Ward Creek	7000	2/27	77	26.7	42.5	43.8
Rubicon #1	8100	2/28	99	30.6	48.4	-
Rubicon #2	7500	2/28	58	20.2	31.4	-
Rubicon #3	6700	2/28	44	13.7	20.6	-
Richardsons #2	6500	2/26	40	12.2	19.1	12.2
Echo Summit	7500	2/27	75	25.7	32.7	33.8
Hagans Meadow	8000	2/26	48	14.6	19.7	24.3
Freel Bench	7300	2/26	27	8.4	12.0	14.0
Upper Truckee	6400	2/26	21	7.6	10.0	10.6
Daggetts Pass	7350	2/26	23	6.8	10.4	11.9
Glenbrook #2	6900	2/26	30	8.4	12.7	13.6
Marlette Lake	8000	2/25	52	14.4	22.7	21.7

SNOW SURVEY & WATER SUPPLY FORECAST

CARSON VALLEY S.C.D., NEVADA
and ALPINE S.C.D., CALIFORNIA



LOCATION MAP

LEGEND

Watershed Boundary
S. C. District Boundary
County Boundary
Forecast Point
Snow Course

MARCH 1, 1959

March 1 snow surveys indicate a below normal water supply along the Carson Rivers.

The April 1-July 31 flow of the East Carson near Gardnerville is being forecast at 170,000 acre feet or 87% of the 1938-52 flow. Last year the flow was 276,000 acre feet.

The West Carson at Woodfords is being forecasted for April-July at 46,000 acre feet or 84% of normal. Last year the flow was 84,000 acre feet.

(Over)

Plate 3

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Lahontan	286	237	205	218

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. East Carson near Gardnerville, Nev.	170	275	195
2. West Carson at Woodfords, Calif.	46	84	55
3. Carson River near Carson City, Nev.	150	298	192
4. Carson River at Fort Churchill, Nev.	141	274	189

SNOW

MARCH 1, 1959

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD		
		NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)			
Carson Pass		8600		2/27	81	32.6	35.4	30.0	15
Marlette Lake		8000		2/25	52	14.4	22.7	21.7	15
Daggetts Pass		7350		2/26	23	6.8	10.4	11.9	14
Clear Creek		7300		3/5	28	9.1	15.1	16.8	4
Glenbrook "2		6900		2/26	30	8.4	12.7	13.6	7

(Continued from front)

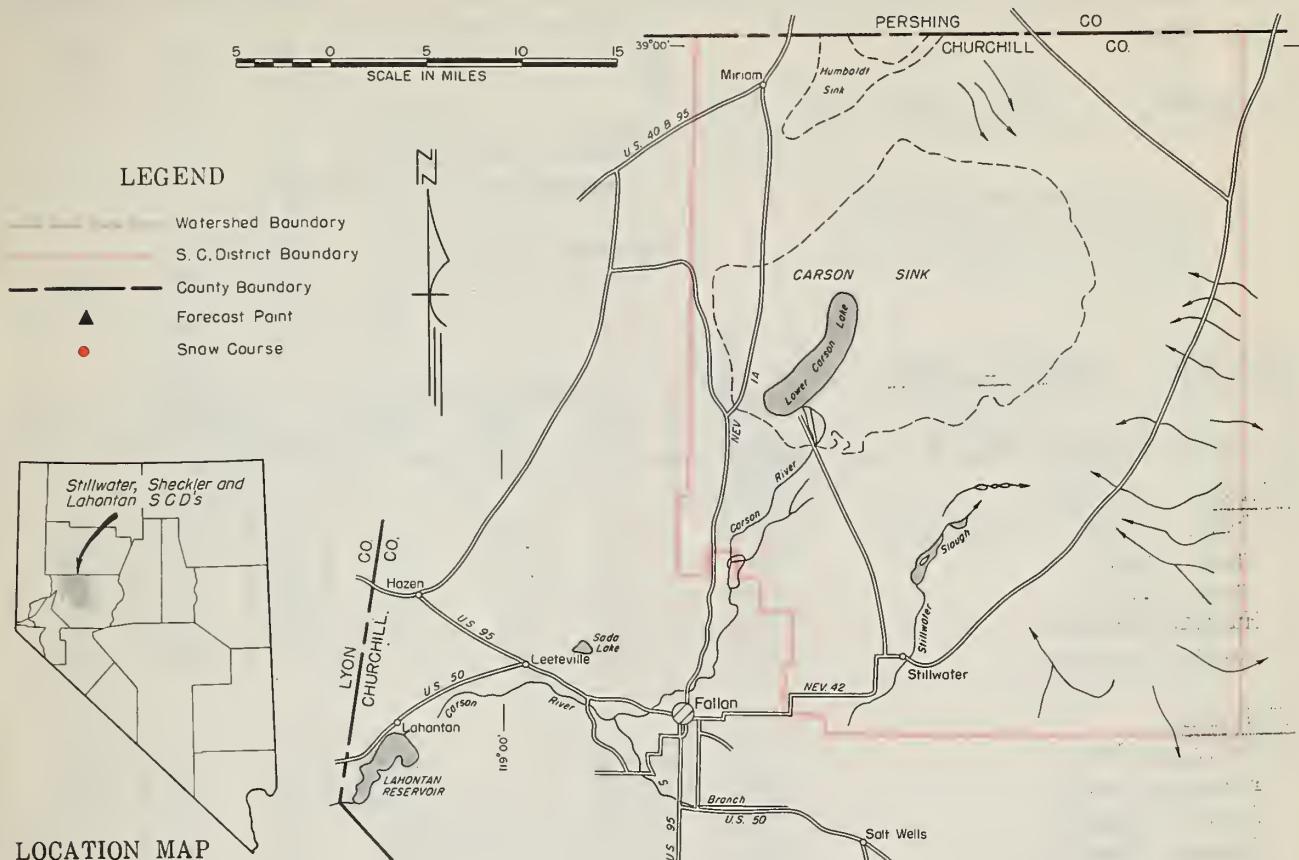
The main Carson at Carson City flow for April-July is expected to be 150,000 acre feet or 78% of the 1938-52 normal. Last year the flow was 298,000 acre feet.

At Fort Churchill, the Carson is expected to flow 141,000 acre feet or 74% of normal. The flow last year during April-July was 274,000 acre feet.

Forecasts will be revised after the April 1 snow surveys.

SNOW SURVEY & WATER SUPPLY FORECAST

STILLWATER, SHECKLER, LAHONTAN S.C.D.'S. & VICINITY
CHURCHILL COUNTY, NEVADA



MARCH 1, 1959

The water users in the Fallon area can expect full water supplies this irrigation season because of above normal reservoir storage.

The rise of Lake Tahoe is expected to be 1.1 foot or 69% of the 15-year 1938-52 normal. Present usable storage in Tahoe is 563,000 acre feet or slightly less than one year ago.

The flow of the Carson at Fort Churchill is being forecast at 141,000 acre feet or 74% of the 15 year normal.

Lahontan Reservoir storage is now 237,000 acre feet which is 109% of the March 1 15 year average or 83% of capacity.

Forecasts will be revised after the April 1 snow surveys.

(Over)

Plate 4

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Lake Tahoe	732	563	583	427
Lahontan	286	237	205	218

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
Truckee River at Farad, Calif.	200	456	279
Lake Tahoe rise (in feet from Apr. 1, assuming gates closed.)	1.1	2.58	1.6
Carson River at Fort Churchill	141	274	189

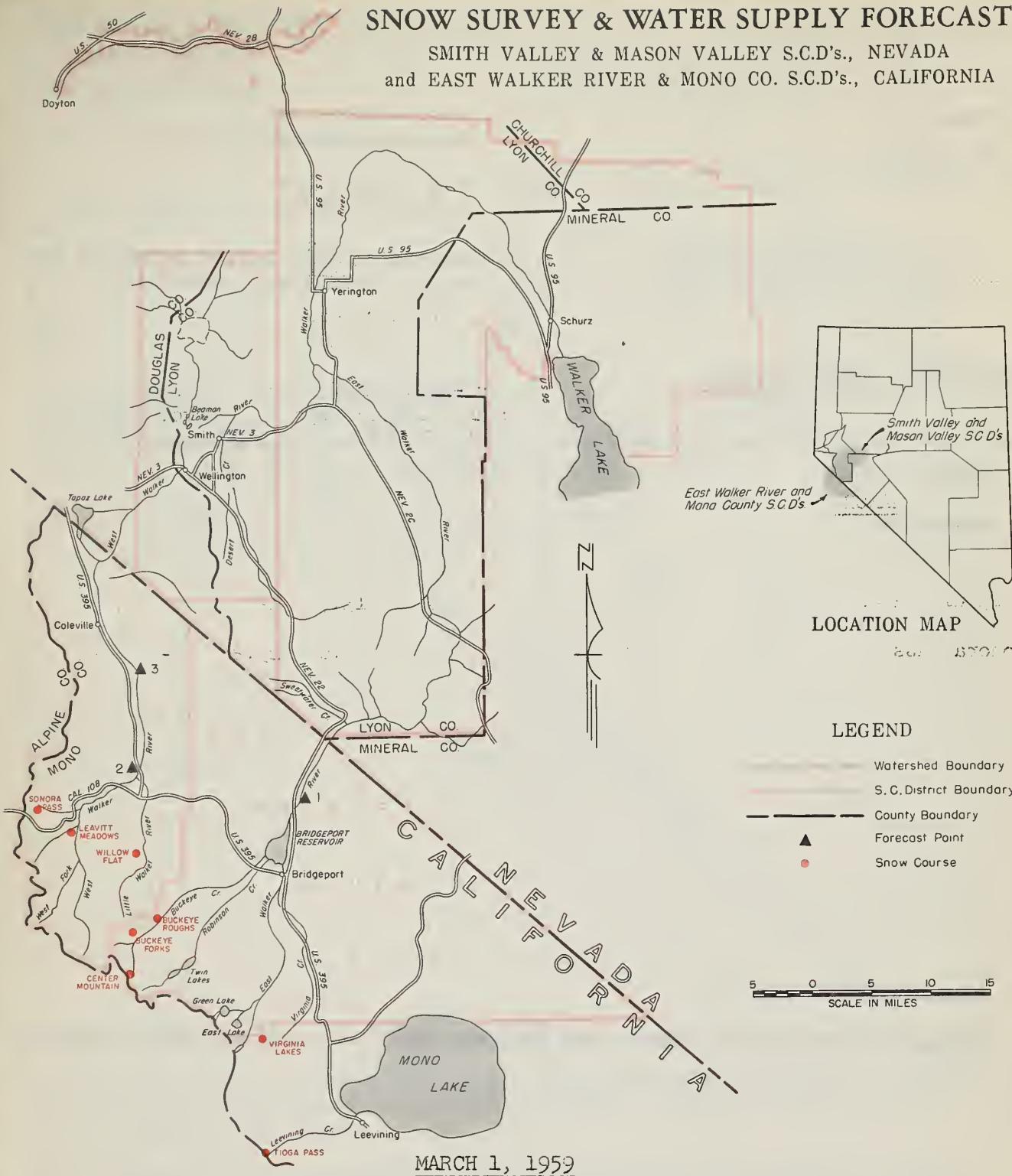
NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
					WATER CONTENT (Inches)	
TAHOE						
Tahoe City	6250	3/4	19	8.0	13.2	15.8
Ward Creek	7000	2/27	77	26.7	42.5	43.8
Echo Summit	7500	2/27	75	25.7	32.7	33.8
Hagans Meadow	8100	2/26	48	14.6	19.7	24.3
Daggetts Pass	7350	2/26	23	6.8	10.4	11.9
TRUCKEE						
Furnace Flat	6600	2/27	81	32.8	44.6	41.5
Fordyce Lake	6500	2/27	79	27.6	39.2	36.0
Donner Summit	6900	2/26	74	25.8	35.7	34.7
Donner Lake #1	5950	2/28	44	15.0	22.3	16.1
Independence Camp	7000	3/3	41	15.4	23.9	17.9
Sage Hen Creek	6500	3/2	42	14.0	18.8	15.4
Boca #2	5900	2/28	15	4.6	7.7	9.0
CARSON RIVER						
Carson Pass	8600	2/27	81	32.6	35.4	30.0
Clear Creek	7300	3/5	28	9.1	15.1	16.8

SNOW SURVEY & WATER SUPPLY FORECAST

SMITH VALLEY & MASON VALLEY S.C.D.'s., NEVADA
and EAST WALKER RIVER & MONO CO. S.C.D.'s., CALIFORNIA



LOCATION MAP

Scale: 15 MILES

LEGEND

- Watershed Boundary
- S.C. District Boundary
- County Boundary
- Forecast Point
- Snow Course

5 0 5 10 15
SCALE IN MILES

Runoff from the high Sierra watersheds of the Walker River will be about 68% of the 1938-52 normal. High elevation soils at the Virginia Lakes and Sonora Pass snow courses were powder dry beneath the snowpack. Lower elevation soils are saturated.

The East Walker near Bridgeport is forecasted to flow 45,000 acre feet or 62% of the 1938-52 normal. This is for the period April 1 through August 31.

The April 1 through July 31 flow of the West Walker is forecasted at 120,000 acre feet or 75% of the 1938-52 normal.
(over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Topaz Lake	59	52	30	40
Bridgeport Reservoir	42	42	30	33

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. East Walker* near Bridgeport, Calif.	45	125	73
2. West Walker near Coleville, Calif.	120	218	160

* Apr.-Aug. runoff period corrected for change in Bridgeport Reservoir.

SNOW MARCH 1, 1959

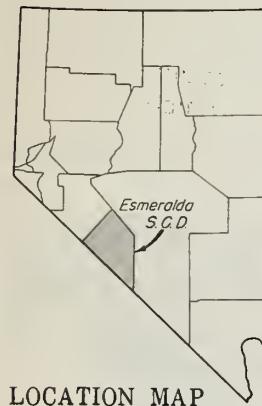
SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
					WATER CONTENT (Inches)	
Virginia Lakes	9500	2/24	49	13.7	12.6	-
Sonora Pass	8800	2/24	59	18.0	25.2	-

(Continued from front)

Bridgeport Reservoir on March 1 was full and Topaz Reservoir was 88% of capacity.

SNOW SURVEY & WATER SUPPLY FORECAST

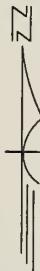
ESMERALDA S.C.D., ESMERALDA COUNTY, NEVADA



6 0 6 12 18 24
SCALE IN MILES

LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- Forecast Point
- Snow Course



MARCH 1, 1959

Two snow courses were established on the White Mountains last fall to give an indication of the runoff into Fish Lake Valley. They are listed on the reverse side of this sheet.

For comparison, the precipitation station, White Mtn. #1 at elevation 10,150 is tabulated below. The period November 1 to February 28 is used for comparison.

Year	Nov.	Dec.	Jan.	Feb.	Total
1955-56	0.35	6.03	2.79	0.16	9.34
1956-57	T	.07	2.03	1.25	3.35
1957-58	1.22	1.22	1.61	2.05	6.10
1958-59	0.84	0.07	0.29	3.10	4.30

Mountain soils are very dry and will use most of the snow water. Very little runoff can be expected.

(over)

Plate 6

STORAGE (1,000 Ac. Ft.)

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

FORECAST POINT	FORECAST		MEASURED
	THIS YEAR	LAST YEAR	NORMAL

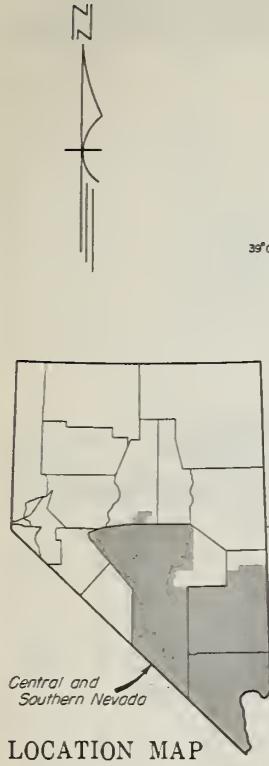
NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
					WATER CONTENT (Inches)	
					LAST YEAR	NORMAL
Montgomery Pass Campito Mtn. (White Horse)	7100 10200	2/25 3/3	10 15	2.4 3.8	New Course New Course	

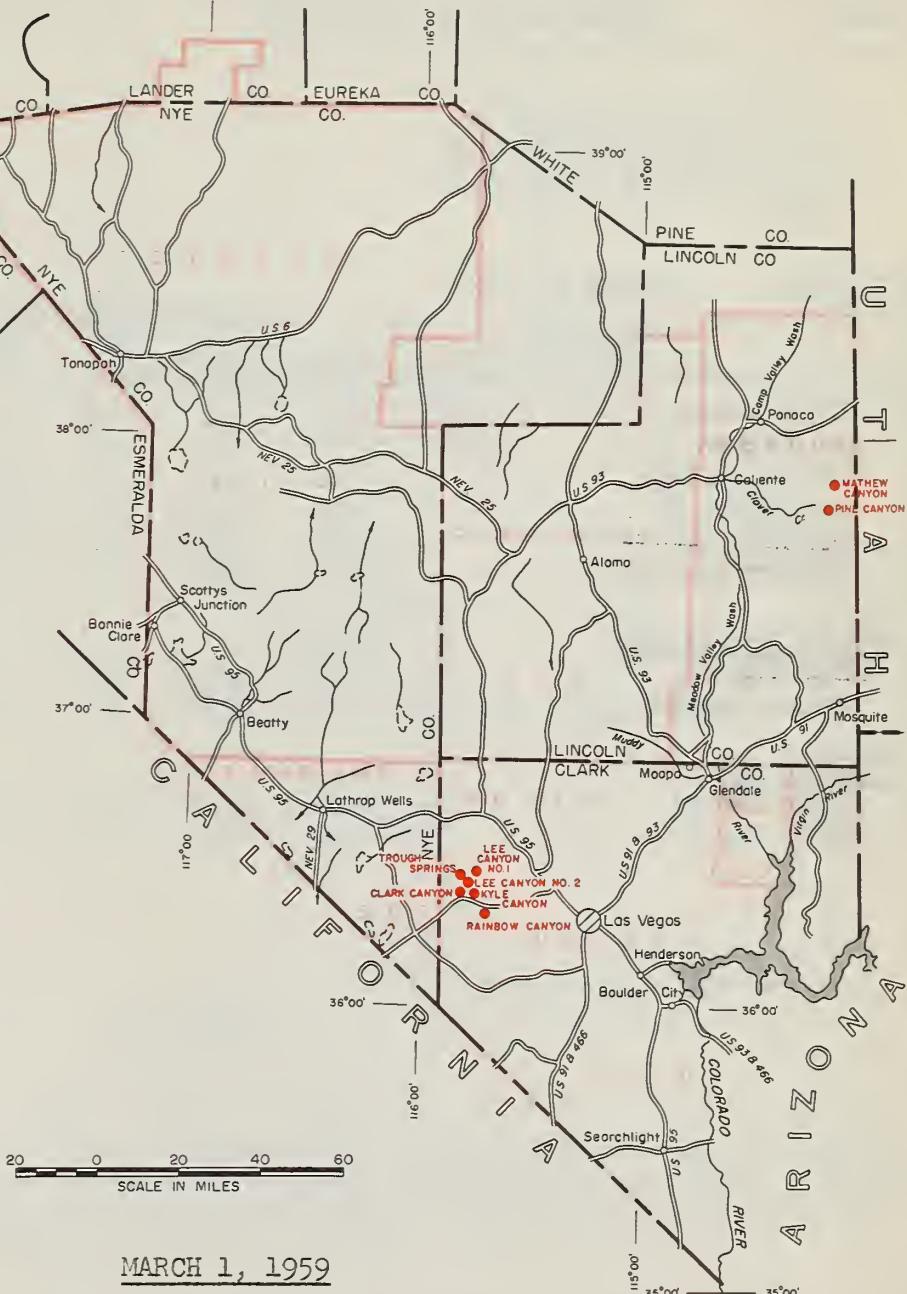
SNOW SURVEY & WATER SUPPLY FORECAST

CENTRAL and SOUTHERN NEVADA
CLARK, LINCOLN & NYE COUNTIES, NEVADA



LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course



The snow cover in the Spring Mountains near Las Vegas is about 75% of the 1938-52 March 1 normal. Groundwater recharge from the snowpack will be below normal this year.

Two snow courses were measured on Clover Creek, tributary to Meadow Valley Wash. Mathew Canyon snow course reported 5.3 inches of water and on Pine Canyon 4.6 inches of water. Both courses were above the March 1, 1938-52 normal.

In the upper end of the Reese River in northern Nye County, two snow courses were about normal. If normal spring temperature and precipitation occurs, small streams coming from the south end of the Toiyabe Mountains should have fair runoff.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Mohave	1810	1696	1743	1498
Mead	27217	21194	19712	18517

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL

NOTE : All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

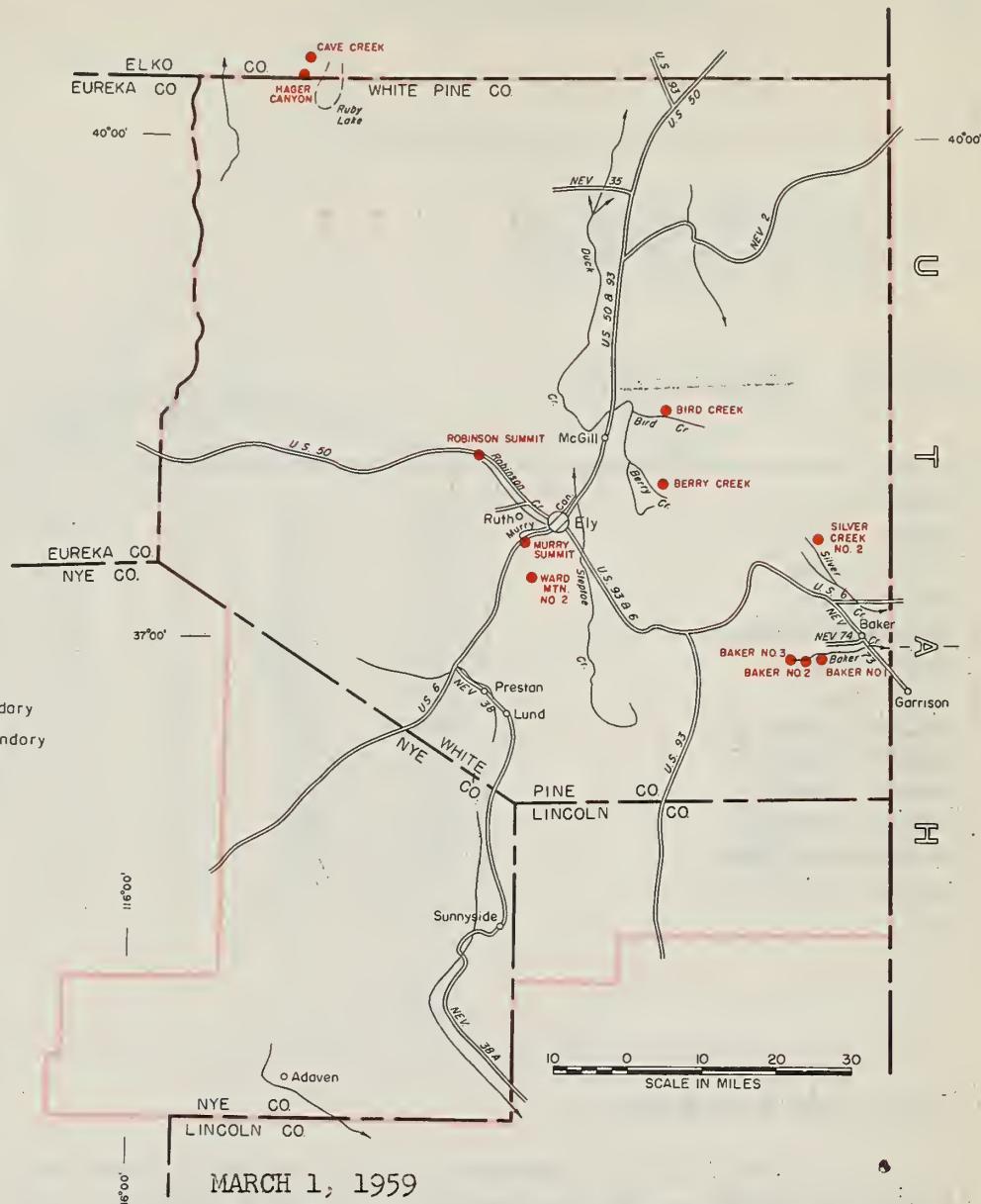
SNOW

MARCH 1, 1959

SNOW COURSE		CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
Clark Canyon	9000	3/1	21	5.4	7.0	7.5	7
Lee Canyon #2	9000	3/1	28	7.9	7.8	11.0	12
Trough Springs	8500	2/28	16	4.6	6.6	6.6	7
Lee Canyon #1	8300	2/23	24	7.2	6.3	9.8	12
Kyle Canyon	8200	2/22	30	8.7	7.6	11.0	12
Rainbow Canyon #2	8100	2/22	44	11.8	14.4	14.5	6
<u>MEADOW VALLEY SCD</u>							
Pine Canyon	6200	3/1	11	4.6	0	3.3	4
Mathew Canyon	6000	2/28	11	5.3	0	2.7	4
<u>TONOPAH SCD</u>							
Upper Corral	8500	2/25	15	4.6	-	5.5	10
Lower Corral	7500	2/25	7	2.3	0.9	1.9	10

SNOW SURVEY & WATER SUPPLY FORECAST

WHITE PINE S.C.D., WHITE PINE, LINCOLN & NYE COUNTIES, NEVADA



Irrigation season water in White Pine Soil Conservation District will be poor if the present snowpack trend continues and spring precipitation is average. Recently completed snow surveys show snow-stored water to be considerably less than last year and about 50% of the 1938-52 March 1 average.

Soil moisture conditions under the snowpack were found to be dry and will require a significant amount of the snow-stored water to saturate the soil before runoff occurs.

Snow surveys on the Snake Range near Baker and Garrison, indicate below normal snow-stored water conditions. Snow courses in this area were found to be about 50% of the 1938-52 March 1 average.

Courses on the west slope of the Schell Range on Bird and Berry Creeks were also about 50% of the 1938-52 March 1 average.

STORAGE (1,000 Ac. Ft.)

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	THIS YEAR	LAST YEAR	NORMAL

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW MARCH 1, 1959

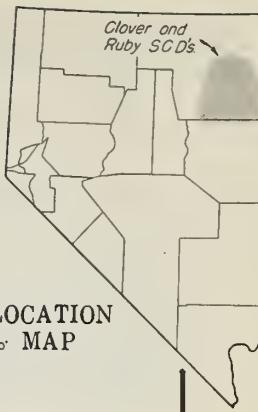
SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
Cave Creek	7500	3/2	18	5.7	20.7	15.5 11
Hager Canyon	8000	3/2	24	3.9	27.6	18.5 12
Bird Creek	7500	3/2	12	2.5	2.9	4.7 14
Berry Creek	9100	3/2	31	7.9	10.1	14.0 5
Robinson Summit	7600	2/27	10	1.7	1.8	5.2 4
Murry Summit	7250	2/27	15	3.1	2.7	4.0 15
Ward Mtn #2	7875	2/26	38	8.7	10.1	New Course
Silver Creek #2	8000	3/3	17	2.8	3.8	New Course
Baker Creek #3	9250	3/4	32	8.0	15.2	15.9 8
Baker Creek #2	8950	3/4	30	7.5	12.9	16.4 11
Baker Creek #1	7950	3/4	15	3.7	4.8	6.7 11
Kalamazoo Creek	7400	3/3	17	3.7		New Course
White River #1	7400	2/26	14	3.1		New Course

(Continued from front)

Two snow courses in the northwest corner of White Pine County at Ruby Lake National Wildlife Refuge on the east slope of the Ruby Mountains were the lowest in nineteen years of record or about 35% of 1938-52 average.

SNOW SURVEY & WATER SUPPLY FORECAST

CLOVER & RUBY S.C.D.'s, ELKO COUNTY, NEVADA



10 0 10 20
SCALE IN MILES

LEGEND

Watershed Boundary

S. C. District Boundary

County Boundary

Forecast Point

Snow Course

DRY CREEK

Ryan Ranch

DORSEY BASIN

LAMOILLE NO. 1

LAMOILLE NO. 2

LAMOILLE NO. 3

LAMOILLE NO. 4

LAMOILLE NO. 5

GREEN MOUNTAIN

HARRISON NO. 1

HARRISON NO. 2

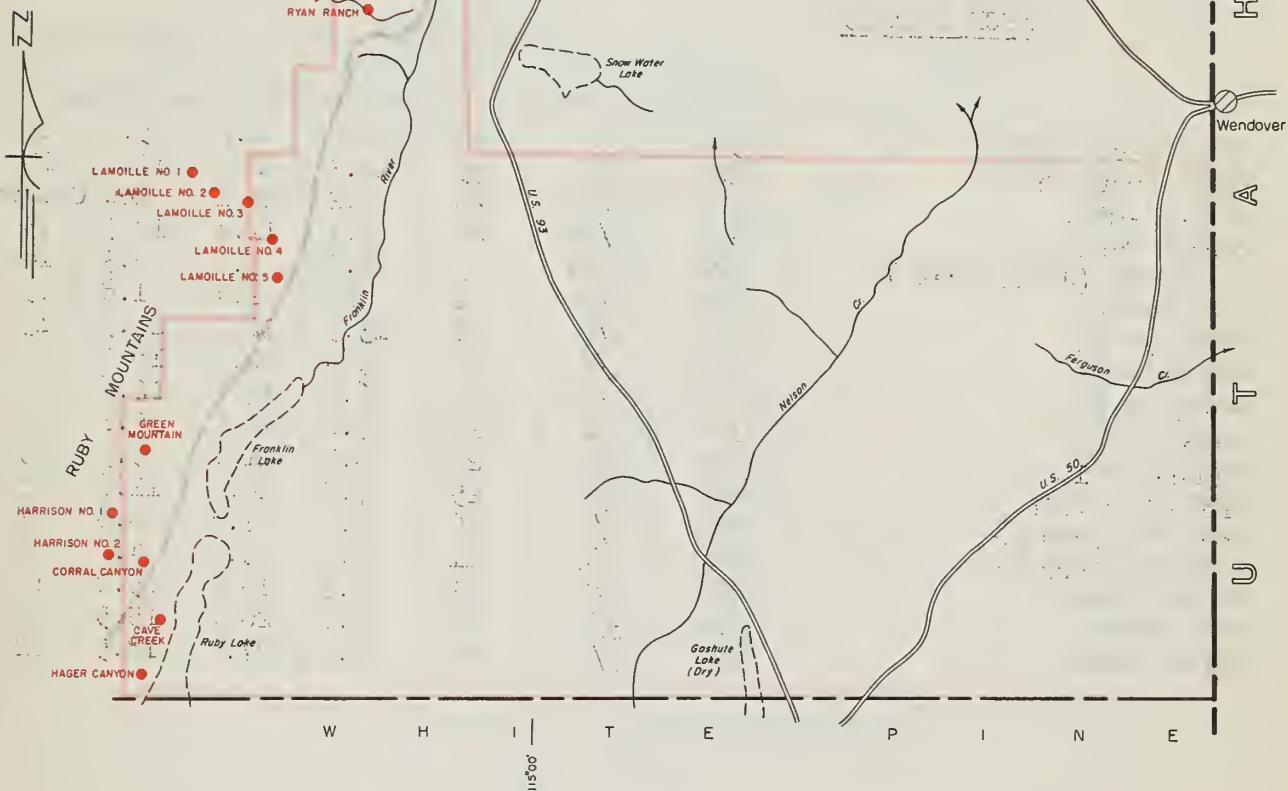
CORRAL CANYON

CAVE CREEK

HAGER CANYON

UPPER TROUT CREEK
LOWER TROUT CREEK
EAST HUMBOLDT RANGE
HOLE-IN-MOUNTAIN

LOCATION
41°00' MAP



MARCH 1, 1959

Recent snow surveys on the west slope of Ruby Mountains indicate snow stored water to be about 54% of the 1938-52 March 1 average. Two courses at the Ruby Lake National Wildlife Refuge were the lowest on record at about 35% of the 1938-52 average.

A new course, Hole-in-Mountain at 7900 feet measured 8.2 inches of water or about 1/3 of last years measurement.

All streams flowing from the eastern slope of the Ruby Mountains will run from fair to poor if the present trend continues.

Plate 9

(over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	LAST YEAR	NORMAL	

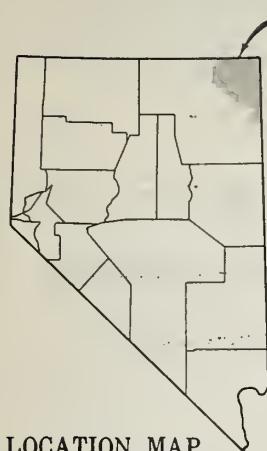
NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW MARCH 1, 1959

SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
Lower Trout Creek	6900	3/2	6	2.2	6.2	5.0	13	
Upper Trout Creek	8500	3/2	35	10.3	22.2	19.8	14	
Hole-in-Mtn.	7900	2/28	25	8.2	27.1	New Course		
Dorsey Basin	8100	2/24	26	7.1	11.4	10.5	15	
Dry Creek (Jakes Creek)	6500	2/24	9	2.2	5.4	5.3	14	
Ryan Ranch	5800	2/24	T	T	2.4	1.8	15	
Lamoille #5	8700	3/2	42	13.5	32.2	23.5	13	
Lamoille #4	8000	3/2	30	9.0	20.2	18.0	12	
Lamoille #3	7700	3/2	23	6.6	13.7	12.6	15	
Lamoille #2	7300	3/2	20	5.6	12.3	10.1	15	
Lamoille #1	7100	3/2	20	5.4	11.7	9.9	15	
Green Mountain	8000	3/2	25	7.5	18.0	11.6	13	
Harrison Pass #2	7400	3/2	16	4.3	7.8	4.6	13	
Harrison Pass #1	6600	3/2	11	3.0	5.8	4.6	15	
Corral Canyon	8500	3/4	27	7.5	19.9	15.2	13	
Cave Creek	7500	3/2	18	5.7	20.7	15.5	11	
Hager Canyon	8000	3/2	24	6.9	27.6	18.5	12	

SNOW SURVEY & WATER SUPPLY FORECAST

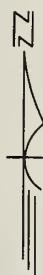
NORTHEAST ELKO S.C.D., ELKO COUNTY, NEVADA



LOCATION MAP

LEGEND

- Watershed Boundary
- S.C. District Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course



5 0 5 10
SCALE IN MILES

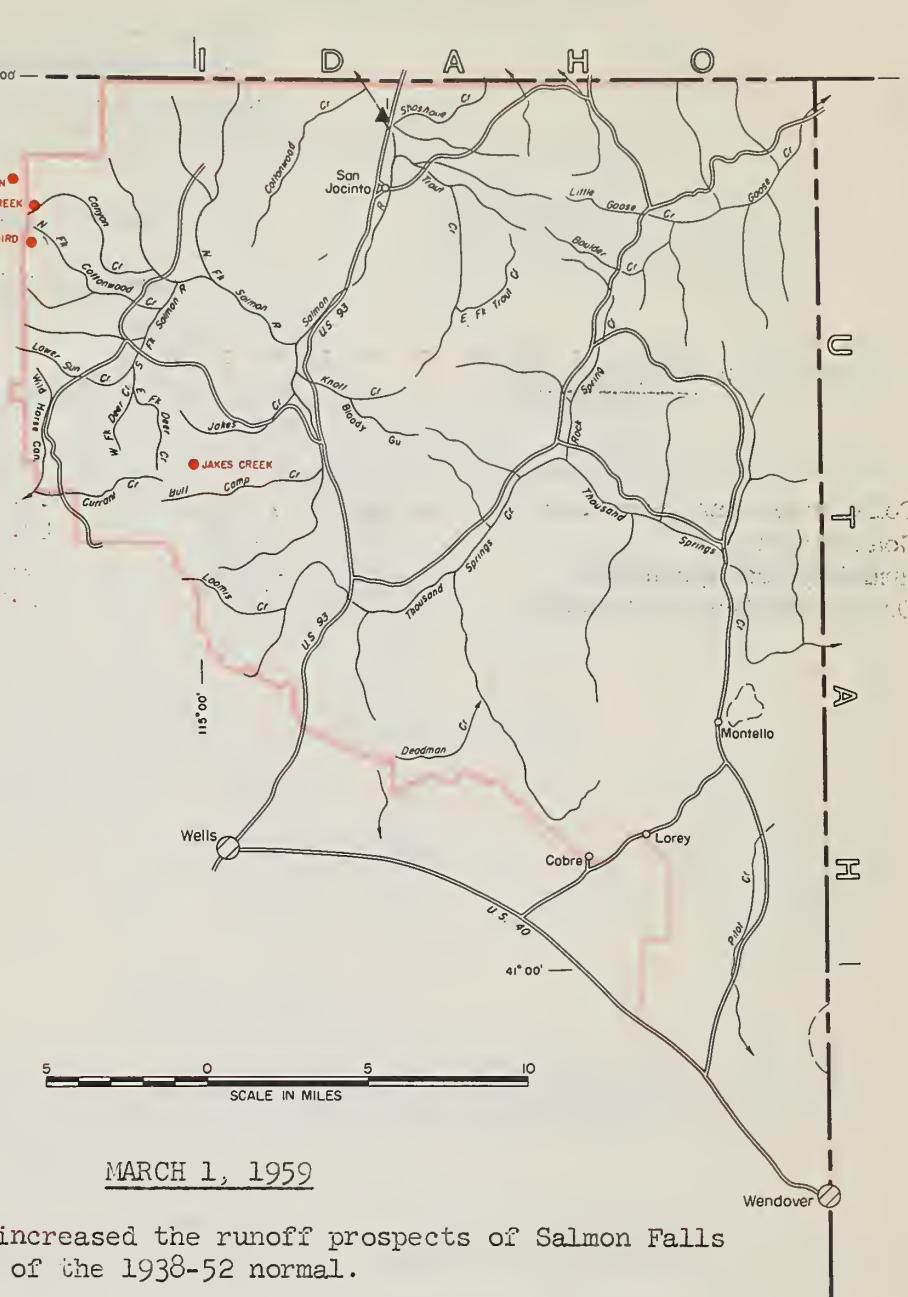
MARCH 1, 1959

High elevation snow pack has increased the runoff prospects of Salmon Falls Creek near San Jacinto to 65% of the 1938-52 normal.

Beneath the high elevation snowpack the soil moisture is reported as dry but lower elevation soils are now wet.

Early range should be fair but spring rains will be necessary to keep grasses growing.

This year, efficient water management will pay big dividends. All streams will drop to low flows early in the year unless heavy storms occur.



(Over)

Plate 10

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
Salmon Falls Crk.* near San Jacinto, Nev.	60	-	92
Salmon Falls Crk.** near San Jacinto, Nev.	57	-	88

* Forecast period of March - September

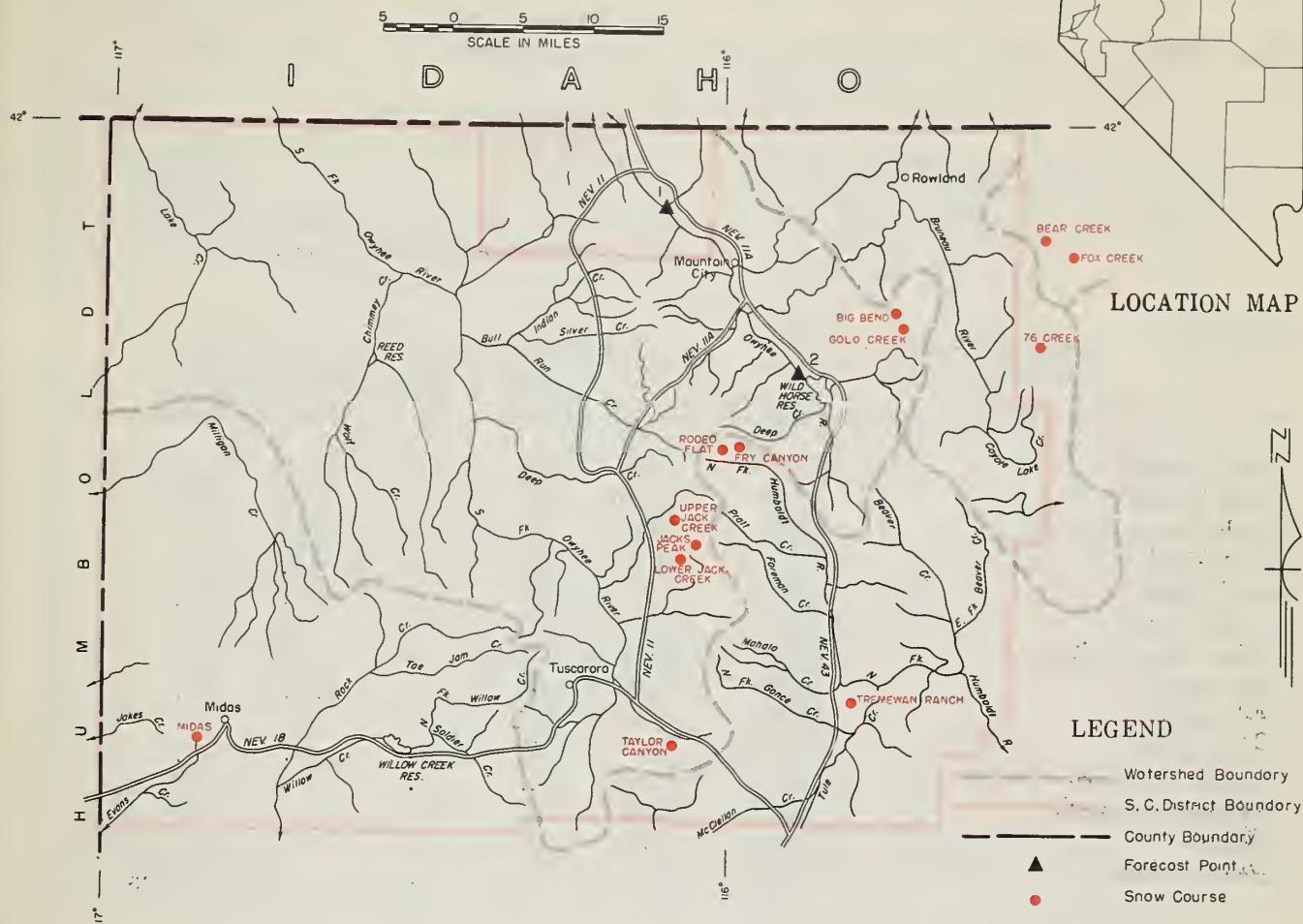
** Forecast period of March - July

SNOW MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
					LAST YEAR	NORMAL
Pole Creek Ranger Station	8330	2/26	42	13.0	17.4	New Course
Goat Creek	8800	2/26	43	12.4	17.2	New Course
Hummingbird Springs	8945	2/26	50	13.8	19.0	New Course
Dry Creek (Jakes Creek)	7000	2/27	9	3.0	New	Course

SNOW SURVEY & WATER SUPPLY FORECAST

DUCK VALLEY & Owyhee S.C.D.'s. ELKO COUNTY, NEVADA



MARCH 1, 1959

Extremely low runoff is in prospect for water users on the Owyhee River. March 1 snow surveys are very similar to the 1954 measurements which produced some of the lowest flows on record. Heavy March storms could change this outlook but the chances are very poor for this to occur.

The Owyhee River near Gold Creek is forecast at 5,000 acre feet or 18% of the April 1 through July 31 normal flow. Wild Horse Reservoir is not expected to fill.

Downstream at Owyhee, this river is expected to flow 20,000 acre feet or 23% of normal.

If spring and early summer rains occur, the runoff could be improved. However, without rain, range conditions will be very poor. Soils at lower elevations are fairly wet now but beneath the high elevation snow, the soil is very dry.

This year, efficient irrigation systems will be of great benefit.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Wild Horse	33	22	19	12

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. Owyhee River near Owyhee 1/	20	110	83
2. Owyhee River near Gold Creek 1/	5	37	23
1/ Corrected for change in storage of Wild Horse Reservoir.			

SNOW

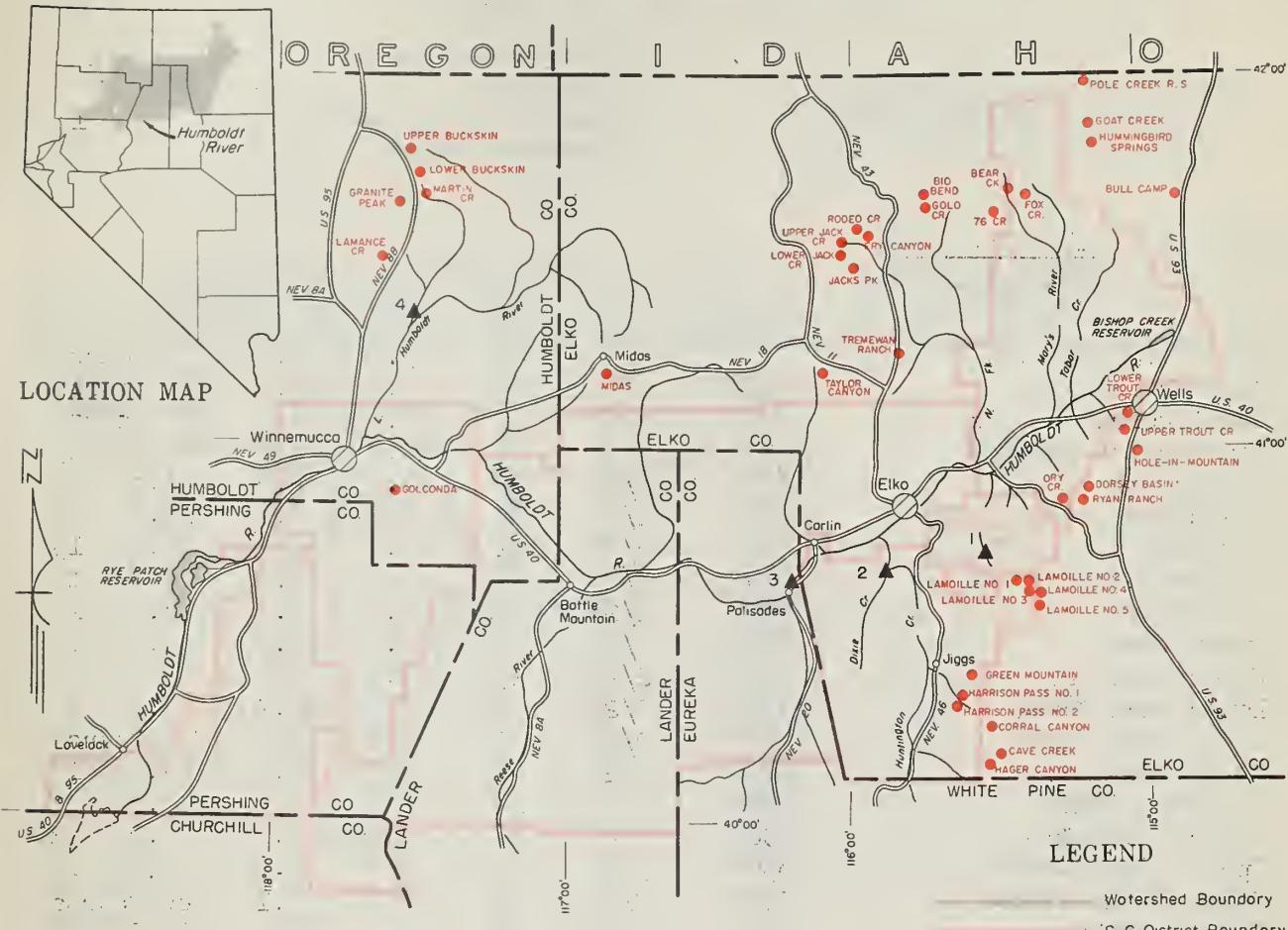
MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
Jacks Peak	8420	2/26	52	15.6	33.4	New Course
Bear Creek	7800	2/25	52	15.8	18.3	17.1
Upper Jack Creek	7250	2/26	23	6.1	17.0	9.5
76-Creek	7100	2/26	29	8.1	14.8	12.3
Fox Creek	6800	2/25	24	6.9	9.9	8.8
Rodeo Flat	6800	2/27	10	2.8	13.9	8.9
Lower Jack Creek	6800	2/26	8	2.0	8.7	4.0
Big Bend	6700	2/27	21	5.6	12.6	9.3
Fry Canyon	6700	2/27	11	3.4	12.4	9.0
Gold Creek	6600	2/27	14	4.1	9.4	5.9
Taylor Canyon	6200	2/26	12	3.5	7.2	5.4
Tremewan Ranch	5700	2/26	T	T	1.5	2.2
Midas	7200	3/2	14	4.4	6.1	5.2
Laurel Draw	6700	3/2	16	5.0		New Course

SNOW SURVEY & WATER SUPPLY FORECAST

HUMBOLDT RIVER

CHURCHILL, ELKO, EUREKA, HUMBOLDT, LANDER & PERSHING COUNTIES, NEVADA



LEGEND

Watershed Boundary
S. C. District Boundary
County Boundary
Forecast Point
Snow Courses

MARCH 1, 1959

A critical low water year is in prospect for water users along the Humboldt River. Extremely low snowpack and dry soils point to one of the lowest years of runoff on the Humboldt River.

Lamoille Creek near Lamoille is forecast for an April 1 through July 31 flow of 16,000 acre feet or 53% of the 1938-52 normal.

The South Fork of the Humboldt River near Elko is forecast at 24,000 acre feet or 28% of normal flow.

The Humboldt at Palisade is being forecasted at 60,000 acre feet or 24% of the 1938-52 normal spring flow.

Fortunately Rye Patch Reservoir on the Lower Humboldt now contains 120,000 acre feet or 135% of the March 1, 1938-52 normal. Lovelock Valley is assured of adequate water supplies for this year.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Rye Patch	178	120	81	89

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1.Lamoille Creek near Lamoille	16	30	30
2.So.Fork Humboldt R. near Elko	24	77	84
3.Humboldt River at Palisade	60	228	249
4.Martin Creek near Paradise Valley	14	30	18

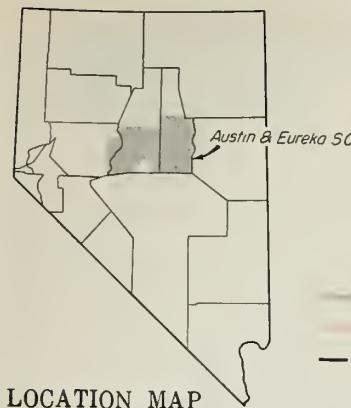
SNOW

MARCH 1, 1959

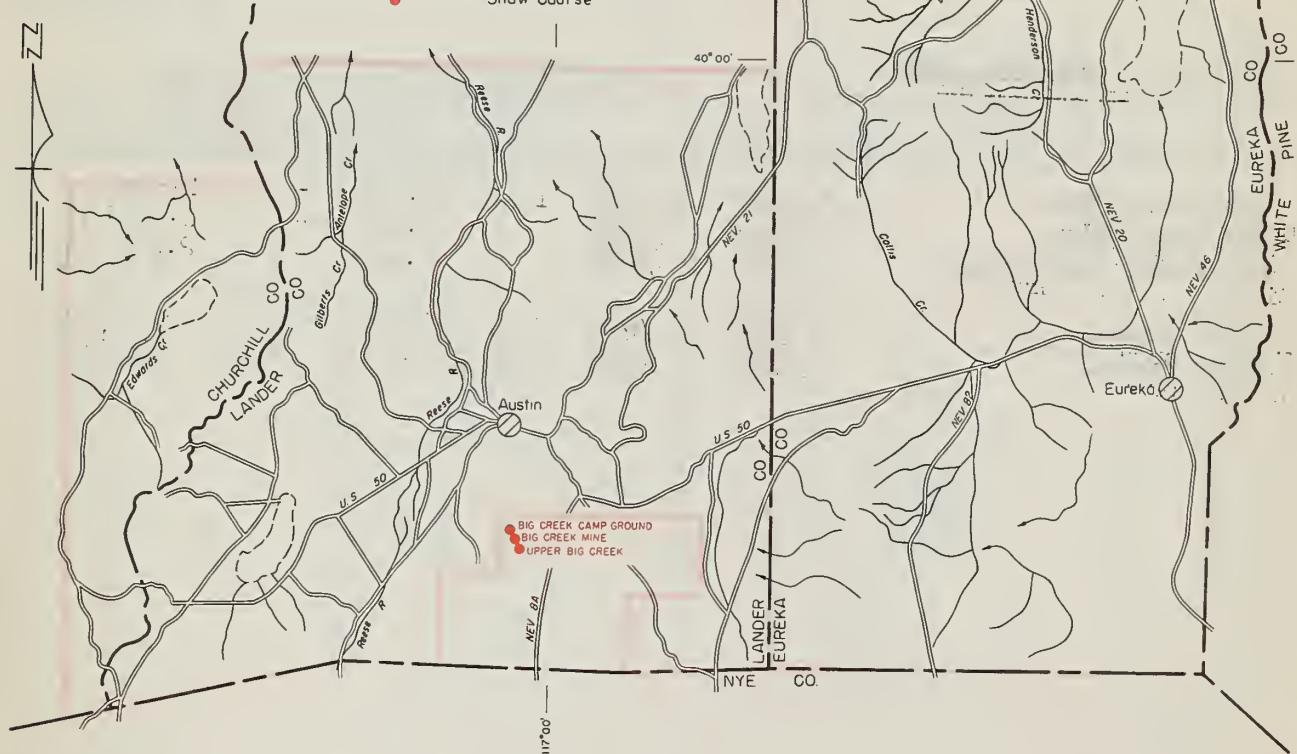
SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)
				LAST YEAR	NORMAL
Pole Creek R. S.	8330	2/26	42	13.0	17.4
Goat Creek	8800	2/26	43	12.4	17.2
Hummingbird Springs	8945	2/26	50	13.8	19.0
Bear Creek	7800	2/25	52	15.8	18.4
Fox Creek	6800	2/25	24	6.9	9.9
76-Creek	7100	2/26	29	8.1	14.8
Big Bend	6700	2/27	21	5.6	12.6
Cold Creek	6600	2/27	14	4.1	9.4
Rodeo Flat	6800	2/27	10	2.8	13.9
Fry Canyon	6700	2/27	11	3.4	12.4
Upper Jack Creek	7250	2/26	23	6.1	17.0
Lower Jack Creek	6800	2/26	8	2.0	8.7
Jacks Peak	8420	2/26	52	15.6	33.4
Tremewan Ranch	5700	2/26	T	T	1.5
Taylor Canyon	6200	2/26	12	3.5	7.2
Lower Trout Creek	6900	3/2	6	2.2	6.2
Upper Trout Creek	8500	3/2	35	10.3	22.2
Hole-in-Mtn	7900	2/28	25	8.2	27.1
Dorsey Basin	8100	2/24	26	7.1	11.4
Ryan Ranch	5800	2/24	T	T	2.4
Dry Creek	6500	2/24	9	2.2	5.4
Lamoille #5	8700	3/2	42	13.5	32.2
Lamoille #4	8000	3/2	30	9.0	20.2
Lamoille #3	7700	3/2	23	6.6	13.7
Lamoille #2	7300	3/2	20	5.6	12.3
Lamoille #1	7100	3/2	20	5.4	11.7
Green Mtn.	8000	3/2	25	7.5	18.0
Harrison Pass #1	6600	3/2	11	3.0	5.8
Harrison Pass #2	7400	3/2	16	4.3	7.8
Corral Canyon	8500	3/4	27	7.5	19.9
Cave Creek	7500	3/2	18	5.7	20.7
Hager Canyon	8000	3/2	24	6.9	27.6
Midas	7200	3/2	14	4.4	6.1
Golconda #2	6000	3/2	9	3.2	5.6
Upper Buckskin	7200	2/25	25	7.8	14.2
Lower Buckskin	6700	2/25	23	6.4	9.7
Martin Creek	6700	2/25	30	7.9	8.8
Granite Peak	7800	2/26	34	10.0	14.2
Lomance Creek	6000	2/26	26	7.7	13.4

SNOW SURVEY & WATER SUPPLY FORECAST

AUSTIN & EUREKA S.C.D.'S., CHURCHILL, EUREKA
& LANDERS COUNTIES, NEVADA



LOCATION MAP



MARCH 1, 1959

On the Toiyabe range south of Austin on Big Creek, surveys show the snowpack to be only 32% of the 1938-52 average. Poor runoff is expected in this area.

On the Upper Reese River snow stored water is about normal. Fair runoff can be expected from this area with normal spring weather.

Soils are partially wet and if spring precipitation is near normal, range conditions will be fair.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST		MEASURED
	THIS YEAR	LAST YEAR	NORMAL

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW

MARCH 1, 1959

SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
Upper Big Creek		8000	2/25	10	1.0	-	5.8	9
Big Creek Mine		7600	2/25	6	1.2	-	3.3	10
Big Creek Camp Ground		6600	2/25	4	0.6	-	2.2	11
Upper Corral		8500	2/25	15	4.6	-	5.5	10
Lower Corral		7500	2/25	7	2.3	0.9	1.9	10



SNOW SURVEY & WATER SUPPLY FORECAST

PARADISE VALLEY & QUINN RIVER S.C.D.'S., HUMBOLDT COUNTY, NEVADA

10 0 10 20
SCALE IN MILES

LEGEND

Watershed Boundary

S. C. District Boundary

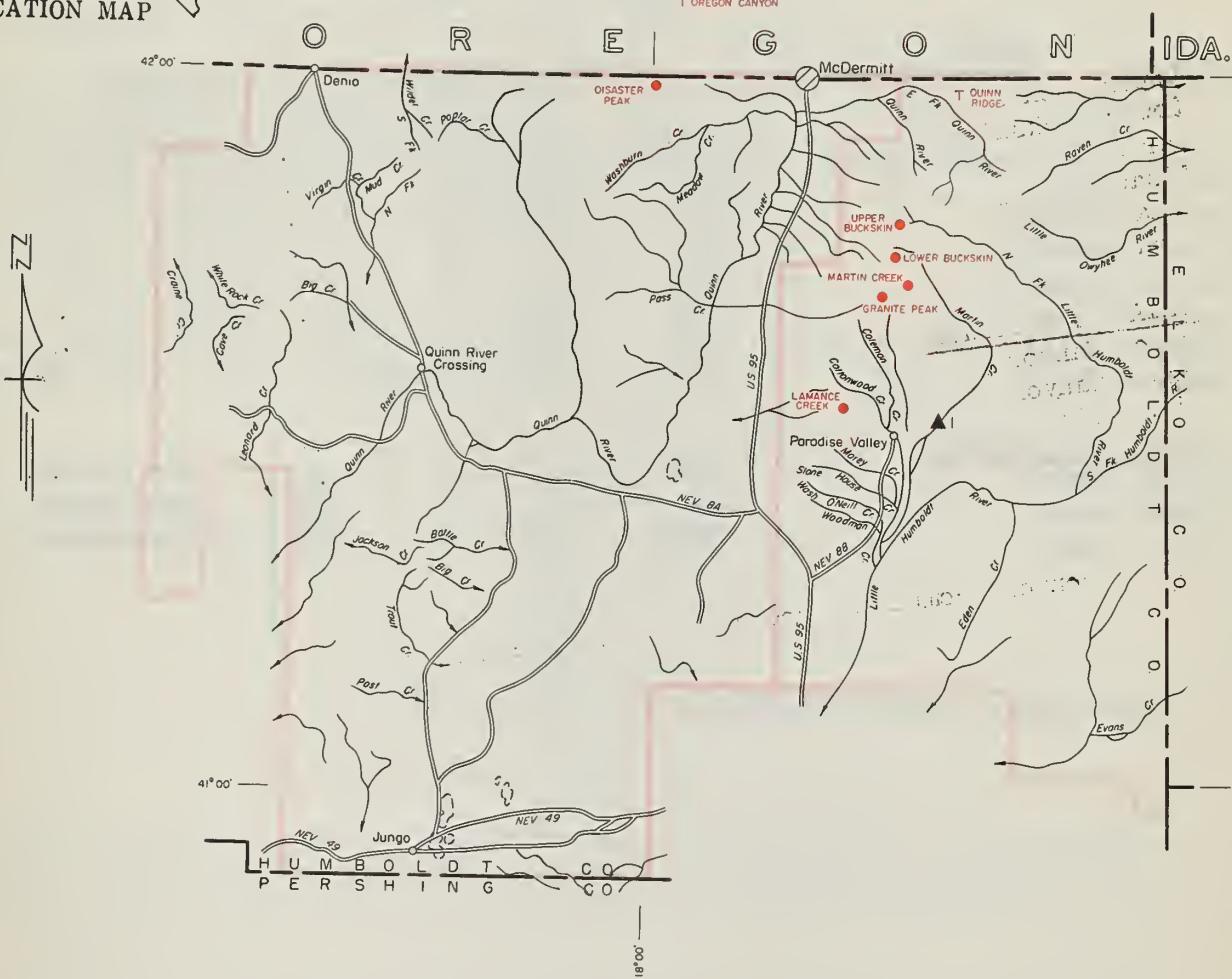
County Boundary

Forecast Point

Snow Course

Aerial Snow Depth Gage

LOCATION MAP



MARCH 1, 1959

Paradise Valley water users can expect an April 1 through July 31 flow of 14,000 acre feet or 78% of the normal from Martin Creek. March 1 snow surveys range from 70% to 90% of the 1938-52 March normal. Dry soils will take some of the snow water before runoff occurs.

Other creeks coming from the Santa Rosa Mountains can be expected to have flows similar to Martin Creek.

This year, efficient water management will pay big dividends.

(over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Rye Patch	178	120	81	89

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	THIS YEAR	LAST YEAR	NORMAL
Martin Creek near Paradise Valley	14	30	18			
Humboldt River at Palisade	60	228	249			

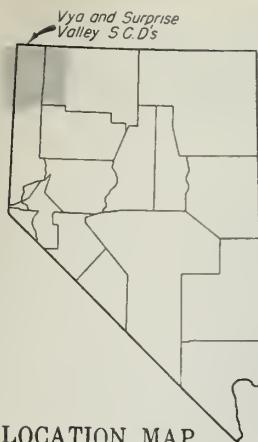
NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW

MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD	
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)		
Granite Peak	7800	2/26	34	10.0	14.2	11.2	15
Upper Buckskin	7200	2/25	25	7.8	14.2	9.9	12
Lower Buckskin	6700	2/25	23	6.4	9.7	8.9	12
Martin Creek	6700	2/25	30	7.9	8.8	8.6	15
Disaster Peak	6500	3/1	39	15.6	25.0	20.6	4
Lamance Creek	6000	2/26	26	7.7	13.4	10.1	14
Leonard Creek	5900	3/1	0	0	0	New Course	
<u>AERIAL SNOW MARKERS</u>							
Oregon Canyon	7240	2/25	14	4.2*		New Marker	
Louse Canyon	6440	2/25	6	1.8*		New Marker	
Quinn Ridge	6300	2/25	12	3.6*		New Marker	

* Water content computed from adjacent snow courses.

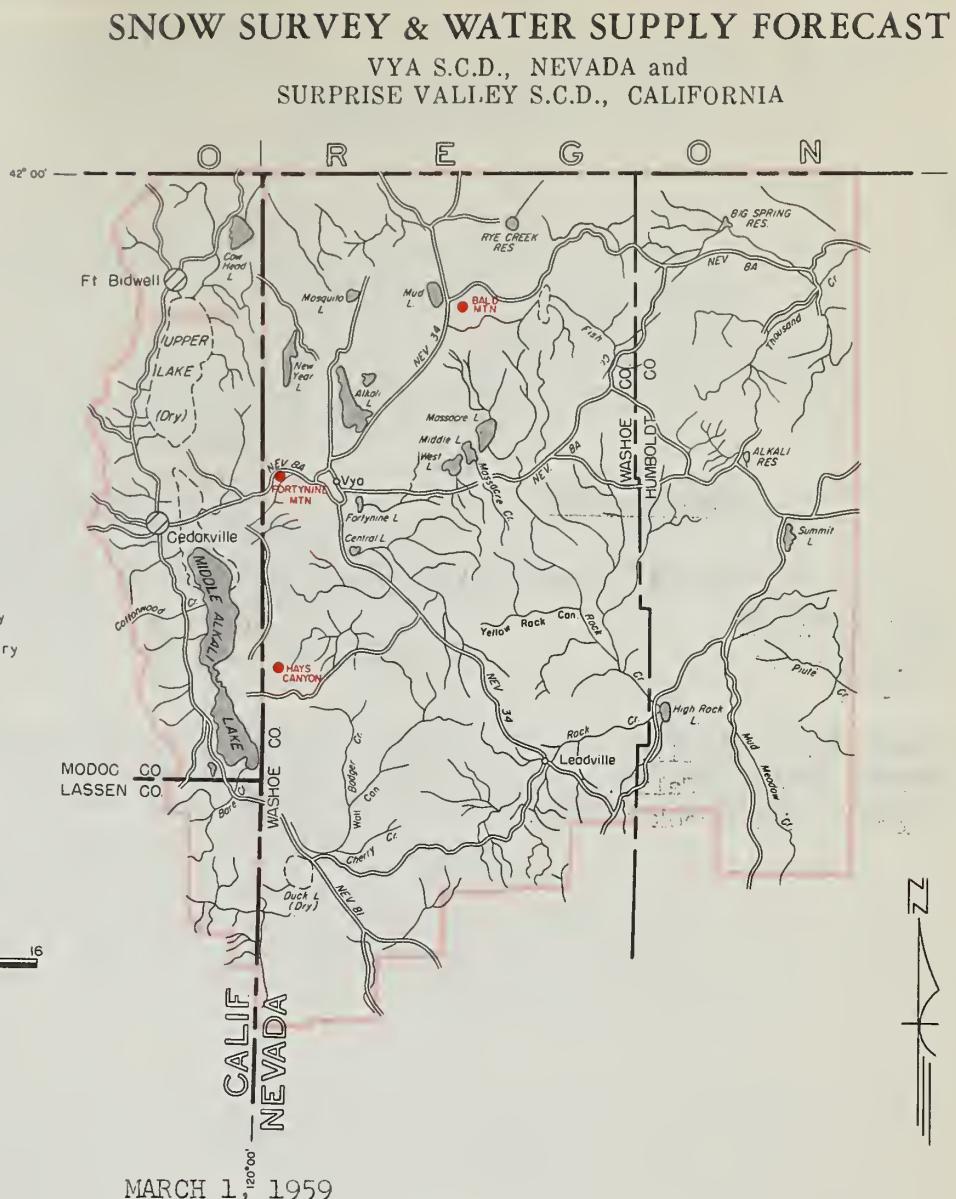


LOCATION MAP

LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- Forecast Point
- Snow Course

0 8 16
SCALE IN MILES



Water supply prospects in this northwest corner of Nevada are for very low flows. Unless heavy storms occur in the next few weeks, streams will dry up much earlier than usual. Because of dry soils, range feed will be entirely dependent on spring and summer rains.

Bald Mountain snow course on the Sheldon Antelope Refuge measured 2.8 inches of water or only 68% of the 1938-52 March 1 normal. Hays Canyon and 49-Mountain snow courses have no normals for comparison but reflect the same below normal conditions as Bald Mountain.

In the Warner Mountains, the snowpack is also very low. Cedar Pass snow course was only 55% of the 1938-52 March 1 normal. October 1 through February 28 precipitation at Fort Bidwell has been only 60% of normal and only 76% of normal at Cedarkville for the same period.

Most streams in Surprise Valley SCD will drop off very early this spring. Of course a heavy storm could improve this picture but the chances are very remote.

STORAGE (1,000 Ac. Ft.)

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

FORECAST POINT	FORECAST		
	THIS YEAR	LAST YEAR	MEASURED

NOTE : All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW MARCH 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
Bald Mountain	6720	2/27	9	2.8	4.4	4.1 13
Hays Canyon	6400	2/27	10	3.3	4.1	New course
49-Mtn.	6000	2/26	11	3.5	4.4	New course
Cedar Pass (Calif.)	7100	3/2	29	8.3	17.0	15.0 8
Barber Creek (Calif.)	6500	2/27	26	7.5	12.4	New course
Reservation Creek (Calif.)	5900	2/26	23	3.3	13.4	New course

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

Soil Conservation Service
Forest Service
Geological Survey
Bureau of Reclamation
Fish and Wildlife Service
Army
Navy
Weather Bureau
Agricultural Research Service

STATE

Nevada Department of Conservation & Natural Resources
 Nevada State Engineer
 Nevada State Forester-Firewarden
Nevada Cooperative Snow Surveys
Colorado River Commission of Nevada
California Cooperative Snow Surveys
California Department of Water Resources
Oregon Cooperative Snow Surveys
Nevada Association of Soil Conservation Districts

PRIVATE

Walker River Irrigation District
Amalgamated Sugar Company
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Virginia City Water Company
Kennecott Copper Corporation
Squaw Valley Development Company
Pacific Gas & Electric Company
Nevada Irrigation District
Sierra Pacific Power Company
Washoe County Water Conservation District
Truckee-Carson Irrigation District
Pershing County Water Conservation District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

Federal - State - Private
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*